A NEW COLLECTION BY TEN OF THE FINEST WRITERS

SCIENCE FICTION Greats

WINTER NO. 16 • 1969 STILL 50c

RAY BRADBURY
ISAAC ASIMOV
POUL ANDERSON
RON GOULART
RANDALL GARRETT
ROBERT F. YOUNG
HENRY SLESAR
RICHARD WILSON
DANIEL F. GALOUYE
ROG PHILLIPS

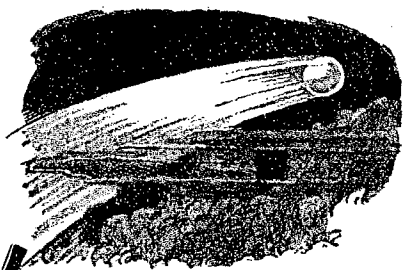
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

RIDDLES OF SCIENCE

Origin of the Moon

THERE HAVE BEEN **SEVERAL THEORIES** ADVANCED ON THE ORIGIN OF **EARTH'S MOON**. BUT **NONE** OF THEM HAVE BEEN **DEFINITELY PROVEN**. **LUNA'S ANTECEDENTS** ARE STILL A **MYSTERY**.

ONE THEORY HAS IT THAT DURING **EARTH'S YOUTH**, WHILE STILL IN A CHAOTIC STATE, A LARGE FRAGMENT BROKE AWAY, AND FLOATED OUT INTO AN ORBIT AROUND THE PARENT BODY, LEAVING WHAT IS KNOWN TODAY AS **MARACOT DEEP** IN THE PACIFIC . . .



ANOTHER POSSIBILITY IS THE CAPTURING OF A **WANDERING BODY** FROM OUTER SPACE, AND THOUGH MOST ASTRONOMERS TEND TO DISCREDIT THE THEORY, **LUNA** MIGHT ONCE HAVE BEEN A **COMET**.

THE **TIDAL THEORY** IS MOST WIDELY **ACCEPTED**. THE EARTH, TORN FROM THE SUN BY THE ACTION OF A PASSING STAR, IN TURN THREW OFF A SMALLER MASS OF MOLTEN AND GASEOUS MATTER,

THE Chinese have a legend which says their race originally came from the moon, and that the equivalent to Adam and Eve arrived in a ship which flew on wings of flame. The flying dragon. Whether they did or not, some theorists hold that the Moon was originally part of the earth, which broke loose during its molten state, cooled faster, because of its smaller size, and produced a race much earlier than Earth. They point to Chinese legend to bear this out. However, the moon's origin is still unknown.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A NEW COLLECTION BY TEN OF THE FINEST WRITERS

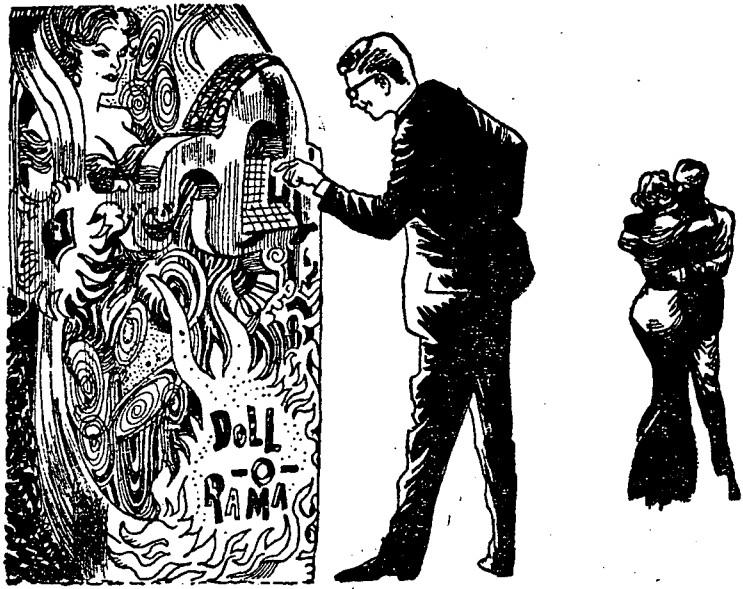
SCIENCE FICTION GREATS

WINTER NO. 16 1969

ROBERT F. YOUNG	4	DOLL-FRIEND
RAY BRADBURY	20	THE END OF THE BEGINNING
RANDALL GARRETT	24	THE MAN WHO HATED MARS
DANIEL F. GALOUYE	40	THE BIG-BLOW UP
RICHARD WILSON	62	KILLER IN THE CRIB
ISAAC ASIMOV	81	THE UNUSED STARS
RON GOULART	87	JUNIOR PARTNER
HENRY SLESAR	97	THE SUCCESS MACHINE
POUL ANDERSON	110	SCIENCE AND SUPERMAN: AN INQUIRY
ROG PHILLIPS	118	CAMOUFLAGE

SCIENCE FICTION GREATS is published quarterly by Ultimate Publishing Co., Box 7 Oakland Gardens, Flushing, N.Y. 11364 at 50c a copy. Subscription rates: one year (4 issues) U.S. and possessions: $1.65; Canada and Pan American Union Countries: $2.00; all other countries: $2.50. Copyright 1969 by Ultimate Publishing Co., Copyrighted 1955, 1956, 1957, 1959, 1961, 1962 by Ziff-Davis Publishing Co. All rights reserved.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



DOLL-FRIEND

By ROBERT F. YOUNG

ILLUSTRATOR SUMMERS

He had a beautiful wife. But the girl he realy loved came out of a slot machine — warm and soft and ciinging and unalive.

OF ALL the doll-friends Carter had ever danced with, Edie Four was by far his favorite. The mere act of depressing keys E, D, and 4 on the console of the huge juke-doll box gave him a thrill comparable to the thrill Aladdin must have felt when he rubbed his magic lamp; and the mere sight of her when

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

she emerged, all tall and golden in a golden gown, was in itself well worth the half dollar it cost to bring her to life.

It was a truism to say that all doll-friends were beautiful. Man, working with his lathes and his shapers and his plastics and his photoelectric cells, was a creator in his own right, and while unlike God he could not endow his products with souls, he could, and did, endow them with a physical perfection unmatched by any product ever to have come off the celestial production line. However, Carter's preference for Edie did not stem solely from her physical allure: she had personality, too.

When he said something to her, she didn't respond with the clichés the other doll-friends used. For instance, when he made a flattering remark, she didn't come up with an archaic bromide like, "I'll bet you say that to all the girls!" Instead, she'd say something like, "I'm going to write that down in my diary when I get home tonight, and sleep with it under my pillow." Or, if he asked her for a date—jokingly, of course—she didn't quote Paragraph 16 of the Doll-Friend Handbook, the way the others did. Instead, she'd drop her eyes demurely and say something like, "I'd love to Floyd, but you know what peo-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ple would say," or, "What would your wife think!" Naturally Carter knew that the first shift E-D-4 manipulator in the upstairs control room was responsible for everything she said as well as everything she did; but he preferred to pretend that it was Edie, and Edie alone, who danced and talked with him, and spiked his cup of life with the golden spirits of romance.

"Personally," he said one evening, "I don't give a damn what my wife would think. And if I thought I could get away with it, I'd sneak you out the backdoor sometime and take you riding in my Cadillette!"

"But what good would that do you, Floyd? My manipulator would simply break contact and call the police. And you'd feel awfully silly being picked up with a rag doll on your hands."

"You're not a rag doll!"

"Without my manipulator I'm the equivalent of one."

Carter looked deep into the blue lenses of her eyes. "Who is your manipulator, anyway?"

"You know I'm forbidden to tell you."

Abruptly he whirled her between two of the booths that bordered the dance floor, and stole a kiss. "Anyway, tomorrow's Saturday," he said. "And my wife works full time Saturdays, but I only work half a day. I'm going to monopolize you all afternoon!"

He whirled her back to the dance floor and they wound deftly in and out among the other dancing doll-friends and their partners. It was the last dance of the day that he had time for, and he concentrated on enjoying it. The music became a pink cloud beneath his feet, and Edie turned into a golden-haired goddess.

"You *do* like me the best, don't you?" she said to his shoulder.

"Compared to you, the others are nothing but paper dolls," he whispered to the ribbon in her hair.

But for all his levity he felt depressed when the dance came to an end and he had to escort her back to the juke-doll box. They said good night, and she blew him a kiss over her shoulder as she re-entered the magic portal with her synthetic sisters. Carter headed for the bar straight-away.

He brooded over a beer, staring idly at the door behind the bar that opened on the stairs leading up to the control room, wondering absently why he never saw the manipulators come and go when they changed shifts. Presently he realized that this time when he'd asked Edie for a date, he'd only been *half*-joking. Moreover, Edie — or, more accurately, Edie's manipulator—must have realized it, too. He waited for at least a modicum of embarrassment to apprise him that his infatuation had not quite exceeded the bounds of reality; but all he felt was a poignant regret that the treasured 3:00-7:00 P.M. interval of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the day was rapidly drawing to a close.

At five after seven he left the Doll House and walked the three blocks to the corner where he met his wife every week-day night. They took an airbus home —Marcia's Chevrolette was being summerized, and Carter couldn't see exposing his Cadillette to the hazards of city driving—and sat silently in the semi-darkness, gazing idly at the projected photon signs that filled the April sky. Once the airbus flew right through one that said, TRY A CAKE OF CLOUD SOAP AND SMELL LIKE AN ANGEL, and he felt Marcia wince beside him.

He withheld his usual comment to the effect that it was high time she divested herself of her goddess-robes of idealism and accepted the *status quo*. He was too worn out from the grueling 9:00 A.M.-3:00 P.M. stint at Brainstorm, Inc. to feel like arguing. Glancing sideways at her and noticing the bluish crescents beneath her dark liquid eyes, it occurred to him that she was probably tired, too.

Well let her be tired! he thought. No one was making her work—no one except her own stubborn self. Lord knew, *he'd* never forced her to go out and get a job. That was her own idea —and like most of her ideas, there was no talking her out of it. He was willing to bet, though, that in another month or so she'd talk herself out of it. Working in an age as subject to psychological pressures as the Age of Mass-Creativity was, could become a pretty rough proposition, even when you had a job as easy as the one she claimed to have.

In their split-level apartment, Marcia slipped out of her coat and went into the kitchen. Carter removed his own coat and turned on the 3V set. Presently Marcia reappeared in the kitchen doorway. "Steak and French fries or ham and scalloped potatoes?" she asked.

"Steak and French fries," Carter said.

She returned to the kitchen to open the appropriate vacuum-pac, and he sat down to watch the seven-thirty edition of the Up To The Second News. Her after-image lingered on his retina: tall and dark of hair; classic of features (except for the too-full lower lip); stately of neck and shoulders; Munroesque of breasts . . . He regarded it wonderingly, trying to understand, as he so often had before, how anyone could be so promising to look at and yet be so frustrating to live with. At length the after-image faded, and he turned his attention to the news.

One of the roving cameras had just picked up the aftermath of a collision between an aircab and an airbus. The airbus, in falling, had lodged between two apartment buildings, and white faces were protruding from its windows, mouths round with screams which the audio unit was as yet too distant to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pick up. Above the scene, a rescue 'copter was hovering in the night sky, blades gleaming in the starlight, and beyond its transparent hull the crew could be seen preparing to lower a huge magnet. Carter leaned forward tensely. The best part about live news was its utter unpredictability: not even the producers knew how any given event would come out.

Marcia came into the room. "The table's set, Floyd. Would you like to sit down now?"

"No, not now! Look what's happening. Quick!"

She glanced at the screen, turned away. At that very moment the airbus slipped free and fell the rest of the way down between the two buildings. The audio unit was now in position, and there was the gratifying crunch of metal, the rasp of steel on stone, followed by scream after scream after scream.

"Boy, that was a good one!" Carter said.

"Sounded like a one hundred percenter," Marcia said. She turned down the volume. "Do you want to eat now, or wait and see the blood?"

Carter stood up. "You make it sound like I'm a monster," he said indignantly. "I'm no different from anybody else."

"I know you're not."

The flat tone of voice she used made the statement seem like an accusation. For a moment he was tempted to call her on it; then he shrugged his shoulders and followed her into the kitchen. Her opinion of him had ceased to matter some time ago; it had never mattered very much in the first place.

No, that wasn't quite true, he amended, sitting down and picking up his knife and fork. It had mattered very much when he had married her ten months ago. But that was before he'd had any idea that her high-flown intellectualism had awakened the puritan in her, thereby distorting not only her attitude towards the technological utopia in which she lived, but her attitude towards sex as well.

They ate in silence, till Marcia's Venerian aris flew down from its cage and perched upon her shoulder. "Bread and circuses! Bread and circuses!"

Why don't you teach him to say something funny? Carter nearly said; and then he remembered all the times he really had said it, without result, and went on eating.

" 'Rapunzel, Rapunzel. Let down thy hair!' " the aris said, and made three swift blue circles around the room and realighted on Marcia's shoulder.

"Hush, Sir Gawain!" she said. "Can't you see we're eating?"

" 'The sea is calm tonight, the tide is full—' "

"Hush!"

" 'Ah, love, let us be true!—' "

Marcia's fork made a little clattering sound against her plate. She laid it down carefully

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and picked up her coffee. Some of it spilled when she raised the cup to her lips, and she set the cup back down again. She stood up. "Excuse me," she said. "I'm not very hungry." She put Sir Gawain back in his cage and closed the door; then she left the kitchen.

Carter listened to her footsteps on the split-level stairs that led to the bedroom, listened to the bedroom door close. Presently he resumed eating. He was inured to Marcia's moods.

His thoughts shifted back to Edie and his eyes lifted to the kitchen clock. 8:00 P.M. Eighteen hours to go before he could see her again. He grimaced. Not that the hours themselves mattered so much: it was the way in which he must spend them that was distasteful.

First, the long dull evening in the living room, drinking more than was good for him; and then the long, semi-sleepless night in the same room with a physically irresistible woman who considered an act of love detrimental to human dignity; finally, the weekly Saturday morning Mass-Think . . .

While bringing the salaried employees of a firm together for periodic ideation sessions was not a particularly new practice, enough innovations had been added during the past few decades to lend it a new look. The *modus operandi* at Brainstorm, Inc., was as follows: First, Mr. Morrow, the firm's president, seated the employees around the conference table and passed out two truth tablets to each one. Next, he read Paragraphs 124 and 199 of the section of the revised labor law that dealt with management's right to utilize harmless drugs in the "elicitation of maximum output from salaried employees." (Paragraph 124 said in effect that the user would remember only disconnected fragments of what he said—or, in the case of a group, disconnected fragments of what the members of the group said—while under TT-narcosis; and Paragraph 199 said in effect that any employer who utilized the association words and phrases that emanated from an employee's subconscious during TT-narcosis for any purpose not directly related to the advancement of the firm's economic welfare, was subject to 10 days in jail, or a $1,000 fine, or both.) Then he told them to take their tablets, and after they had done so, he instructed them to hold hands with the persons sitting on either side of them. Finally, he dimmed the lights, announced the first subject on which he wanted their subconscious reactions, and turned on the 3V cube that rested in the center of the conference table.

The first subject on this particular Saturday morning was "milk," and the first image to appear on the four vertical sides of the cube was a large glass of it. Taped music, in response to the pressure of Mr. Morrow's

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

knee on a switch beneath the tabletop, began flowing from hidden wall-speakers.

For a while the music had the acoustics to itself. Then: "Kidney stones," Harris of Accounts, who sat across the table from Carter, said.

"Old Mother Hubbard," Miss Stokes, who sat on Carter's right, said.

"I got drunk the day of my mother's funeral," Minton of Innovations, who sat on Carter's left, said.

"Prunes," Carter, who was more aware of Miss Stokes' clammy hand in his, and her somewhat sere countenance hovering at the edge of his vision than he was of the image on the 3V cube, said.

The glass of milk transmuted to a mother nursing her child. Brahms' *Lullaby* sounded softly from the wall-speakers.

"Malthus," Miss Stokes said.

"I must remember to get my mother a birthday present," Harris of Accounts said.

"Foam rubber," Miss Brennan, who sat between Harris and Mr. Morrow, said.

Carter glanced across the table at her, instinctively comparing her deftly painted countenance to Miss Stokes' withered one; her full bosom to Miss Stokes' flat one. Once upon a time, before he'd married Marcia, he and Miss Brennan had had many a tentative tête à tête by the drinking fountain, and he toyed momentarily with the idea of resuming them. Miss Brennan, if the yearning looks she leveled at him every now and then could be used as criteria, would be more than willing. Then, as the truth tablets he had taken, finally took complete control of his faculties, his thoughts faded away and his attention wandered back to the cube.

Mother and child had disappeared, and the Horseshoe Falls, with water whitened to represent milk, had taken their place. Brahms' *Lullaby* had blended into Beiderbecke's *In a Mist*, and Miss Stokes was saying, "I much prefer the Victoria Falls in Southern Rhodesia. They're far more magnificent . . . and cleaner, somehow . . ."

"I think it's about time I turned in my Edsel Jr. for a Cadillette," Harris of Accounts said. "The difference in riding comfort might be just what the doctor ordered."

"Wonder what it would be like to drown in milk," Minton of Innovations said.

"Black coffee," Carter said.

"I have two pairs of them," Miss Brennan said, "and I keep the extra pair hidden in the secret compartment in the bottom drawer of my vanity."

The Horseshoe Falls blurred, became a dairy bar filled with rosy-cheeked children downing tall glasses of milk. Beiderbecke's *In a Mist* became Feurtado's *Milk Bar Romp.*

"Den of Iniquity!" Miss Stokes said.

"Maybe I should turn it in for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a Lincolnette," Harris of Accounts said.

"Micromastia," Miss Brennan said.

"Twin beds," Carter said.

The dairy bar was replaced by an endless progression of newly-filled milk bottles issuing from a huge filler. Feurtado's *Milk Bar Romp* gave way to Metz's *Industrial Rhapsody*—

"Bottle babies are the best!" Miss Brennan said suddenly.

"Splendid!" Mr. Morrow said. He brightened the lights. "The very slogan the Dairymen's League was looking for! Nice going, Miss Brennan. An hour from now you won't remember what I'm saying, but there'll be a substantial little bonus included in your paycheck next week to remind you. Now we'll try subject No. 2. Ready, everybody? . . ." He dimmed the lights—

"Toothpaste!"—

Carter was glad when noon came. There was a quality about Mass-Thinks that gave him an unclean feeling, and it was a pleasure to extricate his hand from Miss Stokes' and walk out of the conference room. She trailed after him all the way to the street: she'd always had a romanticized crush on him, and lately she'd been acting sillier towards him than ever. It was almost as though he'd been encouraging her, though nothing could have been farther from the truth.

He was half-afraid she might suggest their having lunch together, but she did not. Instead, after a simpering good-bye, she hurried off into the noonday crowd. He remembered, then, that like Miss Brennan, she too held down two jobs. He gave a sigh of relief and headed towards his favorite restaurant.

He ate leisurely. The Doll House didn't open till two o'clock, and actually all he gained on Saturdays was an extra hour with Edie; but an hour was an hour. While he ate, a strange word kept popping into his mind, and he occupied his thoughts with trying to figure out what it meant and where he'd heard it. The word was "micromastia."

"Mastia," he was pretty sure, denoted a mammary condition, and the prefix "micro" left little doubt as to the nature of that condition. As to where he'd heard the word, that wasn't hard to figure out: unfamiliar words were always popping into his mind after a Mass-Think. He wondered out of whose subconscious this one had emanated, and immediately Miss Stokes' starry-eyed face rose above the horizon of his intuition. He gave a little shudder.

Halfway through his meal, he looked up and saw Miss Brennan sitting several tables away. He nodded to her, but she went right on eating, and he assumed she hadn't seen him. He returned his attention to his plate, wondering why so attractive a girl should be crowding thirty

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and still be unmarried, or even engaged; but he didn't pursue his thoughts for any distance, because he didn't really care, and when he looked up again she was gone.

He finished his meal, smoked a cigarette over a second cup of coffee, then paid his check and took a slow walk to the Doll House. The doors were just opening when he got there, and he made a beeline for the juke-doll box. No one was going to beat his time with Edie if he could help it.

"Hi," she said, when the magic portal delivered her into his arms. "I've missed you."

"I've missed you too," he said, whirling her onto the floor.

After dancing to *Deep Space, Ecstasy* and the *Cadillette Blues*, they sat out a dance in one of the rear booths. Carter ordered a beer. "Well," he said, after the waiter had left, "did you decide to let me take you for a ride yet?"

"I *told* you what would happen if you did. My manipulator would have the police down on your neck in two minutes flat and I'd turn into a rag doll."

"You and your manipulator!" Carter said impulsively. "I'll bet she's an old maid with acute micromastia!"

A silence, softly backgrounded by the music and the susurrus of the dancers' feet, fell between them. Presently: "Perhaps I am," Edie said.

He caught the slip of the tongue, and instantly he was contrite. "I'm sorry, I didn't mean to say that," he said. "It just came out, somehow."

"It's all right, Floyd."

The music ended. "I've got the next dance," he said.

"All right."

When she re-emerged from the juke-doll box to the strains of a slow waltz, he held her close and pressed his cheek against her hair, in an effort to atone for his remark. He was astonished when, without the slightest warning, she looked up into his eyes and said, "Do you still want me to go for a ride with you?"

"Yes, but your man—"

"She's decided to cooperate."

They moved mutually into a corner, came to a standstill. "But how—" Carter began.

"It's very simple. Tonight, after they close, I'll open the juke-doll box from the inside, go out through the backdoor of the building and meet you in the alley."

Carter swallowed. He realized belatedly why doll-friends were so popular: they provided a hitherto nonexistent outlet for men like himself who only wanted to *half*-cheat on their wives. "Suppose something should go wrong," he said. "Suppose—"

"I didn't think *you'd* be afraid!"

"I'm not!"

"All right then. They close at midnight. I'll allow an hour for the bartender to clean up and lock the doors, and then I'll slip

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

outside. You can drive right up to the backdoor—the alley's plenty wide enough. I'll meet you there at one o'clock."

One o'clock, Carter mused. Marcia would be in bed long before then; he could easily leave the apartment and drive the Cadillette into town. And even if she should awake while he was gone, all he had to tell her when he returned was that he hadn't been able to sleep and had gone for a ride in order to relax.

A thought occurred to him: "But won't there be another E-D-4 manipulator on duty then?"

"She goes off at midnight. After she leaves, I'll—my present manipulator will take over again."

Carter took out his handkerchief, blotted his brow. "Well—"

Edie put her arms around his neck and kissed him. "One o'clock, darling," she said. "All right?"

Carter replaced his handkerchief in his pocket. ". . . All right."

"Come on. Let's dance!"

"Chicken and dumplings or chow mein?" Marcia asked.

"Chicken and dumplings," Carter said.

He felt tired. Not even the eight o'clock Up To The Second News interested him, though there was a good street fight and an excellent three-alarm fire on. He hadn't left the Doll House at six, as was his usual custom, but had stayed to see what Edie would be like under the control of the second shift manipulator. He'd been disappointed: she was just as lacklustre and as lackadaisical as the rest of them.

After supper his tiredness turned into stupor, and he dozed off in his 3V chair. When he awoke and glanced at his watch he was startled to see that it was almost midnight.

He checked the bedroom to see if Marcia was asleep, then he went out to the kitchen and washed and shaved, running the water slowly and keeping his razor at low speed. Finally he retied his tie in front of the kitchen mirror, and combed his hair. Sir Gawain, awakened by the light, chortled sleepily to himself in his covered cage, uttering a muffled word now and then, that he had picked up during the day. But Carter didn't pay much attention: he had too much on his mind.

The kitchen clock said 12:29 when he left the apartment and took the lift down to the basement. He walked through the subterranean passage to the parking building, took another lift up to the first level, which was reserved for Cadillettes, and drove his car out into the street. His watch said 12:35 when he turned toward the brightness of the business district.

For a while the unconventional nature of the adventure gave him a feeling of guilt. It wasn't natural, he told himself, for a normal man to crave the purely

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

idealistic companionship which was all any mannequin, either animate or inanimate, could give him; and the fact that he, Carter, did crave it, allowed only two conclusions: either he was abnormal—or abjectly lonely. However, he was confident of his normalcy—indeed, it was his very averageness that had estranged him from his wife—and by the time he pulled into the alley behind the Doll House, his feeling of guilt had transmuted to one of anticipation.

His watch said 1:02, but his headlights picked up nothing but bare brick walls and empty doorsteps. He switched them off and sat in the darkness, waiting. He smoked one cigarette after another; his heart thudded in his throat. He looked at his watch again: 1:23. It occurred to him that it might be fast, but then he remembered that he'd checked it with the kitchen clock before he'd left. He was beginning to wish that the old custom of adorning steeples and domes with timepieces still prevailed so that he could check it again, when he heard the sound of a door opening and closing. Presently a familiar shape separated itself from the building shadows and slipped into the seat beside him. "Hope you didn't have to wait long, darling," Edie said.

He backed out of the alley, swung down the street. Soon they were on the highway. "Drive fast, darling," Edie said, the April wind in her hair.

Aircabs and airbuses had done much towards eliminating highway congestion, but there was still enough traffic to make fast driving precarious. So when the speedometer needle reached 75, Carter held it there. But Edie was far from satisfied. "Faster," she urged. "Faster!"

"What's the hurry?"

"No hurry, darling. "I just love to go fast, that's all."

It wouldn't hurt to humor her a little, he decided. He let the needle creep up to 85 . . . 90 . . . Far down the highway a tri-trailer truck, its headlights blazing, rounded a curve.

"Put your arm around me," Edie said.

He did so, after a moment's hesitation.

"Faster," she said. "Faster!"

"We're going fast enough. What's the matter with you, Edie?"

"I've got micromastia. I'm an old maid with acute micromastia!" Abruptly she giggled. "Kiss me, darling!"

Shocked, Carter tried to push her away; but she put her arms around his neck and, with surprising strength, pulled his face down toward hers. The headlights of the tri-trailer were much closer now, and approaching with meteor-like swiftness. He tried to apply the brake, found his leg interlocked with hers. "No, Edie. Stop!"

"I won't stop."

"You'll get us killed!"

"Not us. You."

He saw her then. Not Edie,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but the embittered spinster who was Edie's soul; sitting grimly in the manipulation room back in the city, still smarting from the unintended allusion to her shame, setting her lover up like a tenpin for the tri-trailer to send caroming. He had heard rumors about the manipulators, rumors that he hadn't believed till now: about how they were old maids who found vicarious pleasure in dancing through their mannequins with other women's husbands, flirting with them, holding hands with them; kissing them . . . And all the while he saw her, he was seeing the tri-trailer, too, with its vehement headlights flashing on and off in wild warning, and hearing the insistent trumpeting of its horn. By now, Edie had managed to pinion his one free arm to his side, and the Cadillette, out of control, was drifting over into the path of the tri-trailer's trajectory. In a moment he would be guts and gristle scattered on the highway, the bloodied remnants of what once had been a man—

And then, an instant before collision was inevitable, Edie gave an anguished cry and grabbed the wheel. She turned it savagely. There was the rush and the roar of the tri-trailer's passing, and a wild careening. Finally there was the gradual return to sanity, as Carter, once again in control, slowed to a shaken stop.

Edie was limp in the seat beside him. He shook her furiously. He slapped her plastic face. Her blue eyes regarded him glassily. Her lovely head lolled on her foam rubber shoulders.

Presently he let her slip from his hands and slide to the floor. He U-turned and started back to the Doll House.

He parked the Cadillette in the alley, got out and tried the backdoor. It was still unlocked. He returned to the Cadillette, picked up the rag doll lying on the floor, carried it inside and propped it in a sitting position against the juke-doll box. Then he headed for the door behind the bar that opened upon the stairs leading to the control room.

He ascended them slowly. Riser-lights bathed his feet in rose-colored light; a plush stair-carpet swallowed his footsteps. In the second-floor hallway, brighter lights burned. It was a long hallway, stretching into the next building; through it and into the next. No wonder he had never seen a manipulator enter through the bar: they had their own entrance.

The control room, however, was directly above the bar, just as he had always imagined it to be. A sign on the door informed him that only licensed manipulators were allowed inside, but a light burned within, and the door was ajar, and he shouldered it aside and stepped brazenly into the sanctum sanctorum.

It was a room of many rooms. Dozens of narrow doors lined its

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

walls, and above each door was a metal plate with a euphonious combination of letters and numerals stamped upon it. He walked along, reading them, till he came to the one he wanted. The door beneath it was open, and he stepped into a brightly lit cubicle.

The cubicle was empty. He had expected it to be: the open doors and the still-burning lights were unmistakable testimony to the flight of the soul of E-D-4. But, while the cubicle was empty of Edie's soul, it was far from being empty of her soul's equipment.

Wires of all sizes ran singly and in groups from the walls, ceiling and even the floor, to the arms, base, back and footrest of a large reclining-chair. Above the chair, a metallic helmet, reminiscent of a twentieth century hair-dryer, was suspended in such a way that the chair's occupant could raise or lower it to whatever level was desired. Metal contact straps lay open on the arms and footrest, waiting to be closed.

He felt the seat. It was still warm. He wondered suddenly what it would be like to be a doll-friend.

He sat down, raised his feet upon the footrest and closed the contact straps around his ankles. He leaned back and lowered the helmet over his head. He discovered that he could close and open the other set of contact straps by a slight downward pressure of his wrists. He closed them and felt with the fingers of his right hand for the switch that should logically be within their reach. He found it presently, and pressed it—

Semi-darkness suddenly enveloped him. He found himself sitting in a cramped position, his back propped against a cold metallic object. Tentatively he stood up . . . and found himself standing on the edge of the dance floor beside the juke-doll box. He was wearing a golden gown. His hair fell to his shoulders.

He was Edie.

He took a step. Another. He felt the floor beneath his feet. Her feet. He raised his . . . her hand, touched his . . . her face. He felt the pressure of his . . . her fingers on his . . . her cheek.

He danced. All alone. In the half-darkness. Through the pale puddles of neon light that seeped through the front window from the street. He ran upstairs into the control room and looked at himself reclining in the chair in the E-D-4 cubicle. He ran back down again.

He had never dreamed that manipulator and mannequin were so completely one. But then, he had never dreamed, either, that a manipulator would attempt to kill him through her mannequin merely because he had called her an old maid with acute micromastia.

The fact was still difficult to digest. It was almost impossible to imagine a woman, even an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

embittered spinster, whom he had never even seen, wanting to kill him because of a chance remark. But he was only assuming he had never seen her. Perhaps he *had* seen her—

Perhaps he *knew* her . . .

He had been walking aimlessly around the dance floor. Now he came to a dead standstill. He felt Edie's gown billow cooly against Edie's thighs. He felt Edie's fingers digging painfully into Edie's palms. He heard his words, distilled through Edie's mechanical larynx, issue incongruously from Edie's lips—

"Miss Stokes!—"

But it *couldn't* be Miss Stokes! Miss Stokes was kind and gentle. Miss Stokes was totally incapable of murder!

Yes, but so was Edie's manipulator.

But Miss Stokes worked for Brainstorm, Inc.—

Yes, from nine to three weekdays and from nine to twelve Saturdays—and it was common knowledge that she held down two jobs. She could easily work a part-time afternoon shift at the Doll House during the week, and a full one on Saturday. It was possible.

But Miss Stokes *liked* him. In her silly way, she *loved* him—

Yes, but might not her loving him have encouraged her to become a licensed manipulator on the chance that she might some day have her love returned vicariously?

But Miss Stokes was an ineffectual old maid!—

Yes. An old maid with acute micromastia . . .

Carter returned Edie to the juke-doll box and left the Doll House. He drove home, hardly aware of the turns he took or the buildings he passed. In the apartment the first thing he did was to go out in the kitchen and open a bottle of brandy.

He took a long pull, and sat down at the kitchen table. He noticed that his hands were trembling. He wasn't surprised: finding out that someone you'd known for years had tried to murder you just because you'd called her an old maid with acute micromastia, was enough to unnerve anyone.

Awakened by the kitchen light, Sir Gawain commenced to chortle in his cage. "Mi—mi—"

Carter shook his head. He still could hardly believe it. Miss Stokes. Poor starry-eyed Miss Stokes; sitting beside him every Saturday morning at the Mass-Think, holding his hand; giving him a monogrammed tie clasp for Christmas; making eyes at him like a schoolgirl whenever he passed her desk—

"Micromastia," Sir Gawain said. "Micromastia!"

Carter had raised the brandy bottle halfway to his lips. He lowered it slowly back to the table. His hands were trembling so badly now that it nearly slipped from his fingers.

He thought back: he couldn't remember having spoken the word aloud. In fact, he *knew* he

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

hadn't spoken it aloud. And Sir Gawain wasn't telepathic. For all his mimical abilities he was still nothing but a bird.

Then—

Carter got up and tore the cloth cover off the cage. Sir Gawain blinked up at him reproachfully. "Micromastia," Carter said.

"Micromastia," Sir Gawain repeated. "*Acute* micromastia!"

Carter shivered. He let the cover fall to the floor. He walked through the living room and up the split level stairs to the bedroom. He looked inside.

Marcia's bed was empty.

In the living room he dialed the operator and asked what time it was. The hour she gave him was a half hour in arrears of the hour registered on his watch.

He returned to the kitchen. To the bottle of brandy. Why? he asked himself. Then: How?

He took the second question in his stride: Any woman could become a manipulator. Any woman could neglect to tell her husband where she worked, especially if her husband wasn't even interested enough to ask. And any woman could slip a mild soporific into her husband's coffee to insure his sleeping sound enough and long enough for her to set his watch and the kitchen clock half an hour back so that she could keep a vicarious date with him without his catching on.

But the first question threw him—

Why?

And then he made a discovery: an act without apparent motivation automatically threw the person who had performed it into a different perspective, and permitted insights that might otherwise have been impossible—

Suddenly he saw his wife for the first time—her emotions seeking expression and her mind steadfastly denying them expression; her highly-sexed body craving his body the way his body craved hers, and her intellect simultaneously repelled by his gross appetite for gory news, bewildered by his passion for doll-friends . . .

Suddenly he realized that only as a doll-friend herself—as Edie—could Marcia become unself-conscious of the sex her real body was overcharged with, and which she was afraid of, and thereby become her own natural, charming self.

As Edie, he had fallen in love with her.

Had she fallen in love with him?

And had his remark about Edie's manipulator being an old maid with acute micromastia turned her love to hate?

But why should it have? A remark like that should have evoked amusement in a woman with Marcia's Munroesque qualities. *Marcia* wasn't an old maid with acute micromastia.

Wasn't she?

Wasn't she really—in a figura-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tive sense—far more of an old maid than Miss Stokes was? Miss Stokes would have welcomed love at least, had it ever come her way; but it never had. It must have come Marcia's way many times, but she had never welcomed it. She had repelled it, instead, or at best endured it. So wasn't she afflicted with an acute micromastia all of her own, and wouldn't his having thrown her shame into her face have antagonized her beyond the bounds of reason because, while the remark wasn't remotely true in the sense intended, it was overwhelmingly true in a sense that hurt far more?

There was the sound of footsteps in the hall.

Marcia, driving wildly through the streets of the city and the suburbs, shocked by what she had tried—and failed—to do; shocked, perhaps, into a new awareness of herself. Coming home now; repentant, frightened—

How much of her unhappiness could have been averted if he had only tried to understand her before? How much of her real love could have been his if he had only made some concession to her intellectual idealism, had even *half*-tried to attain the impossible nobility she wanted in a man? Perhaps it wasn't too late. Perhaps he could still help her. If she would only let him. If—

A key turned in the hall door. He went into the living room and stood in the darkness, waiting. The door opened slowly. She hesitated on the threshold for a moment, silhouetted by the hall light, looking searchingly into his eyes. And then she was in his arms, sobbing.

"It's all right, Marcia," he said. "It's all right, darling."

THE END

CLIP AND MAIL THIS MONEY-SAVING COUPON TODAY

Enter my subscription for **AMAZING STORIES**

6 Issues only $3.00 ..... 12 Issues only $5.00 .....

Name_____

Address_____

City_____ State_____ Zip Code_____

Send the following free issues.....

(Add 50¢ per year additional postage for Canada and Pan American countries; and $1 per year extra for all other foreign orders.)

Mail to: AMAZING/ Box 7, Oakland Gardens, Flushing, N.Y. 11364

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE END OF THE BEGINNING

By RAY BRADBURY

It's an old story—the pride of parents when their boy makes good on his first job. But this was no ordinary boy, no ordinary job.

HE STOPPED the lawn mower in the middle of the yard, because he felt that the sun at just that moment had gone down and the stars come out. The fresh-cut grass that had showered his face and body died softly away. Yes, the stars were there, faint at first, but brightening in the clear desert sky. He heard the porch screen door tap shut and felt his wife watching him as he watched the night.

"Almost time," she said.

He nodded; he did not have to check his watch. In the passing moments he felt very old, then very young, very cold, then very warm, now this, now that. Suddenly he was miles away. He was his own son talking steadily, moving briskly to cover his pounding heart and the resurgent panics as he felt himself slip into fresh uniform, check food supplies, oxygen flasks, pressure helmet, space suiting, and turn as every man on earth tonight turned, to gaze at the swiftly filling sky.

Then, quickly, he was back, once more the father of the son, hands gripped to the lawn-mower handle. His wife called, "Come sit on the porch."

"I've got to keep busy!"

She came down the steps and across the lawn. "Don't worry about Robert; he'll be all right. I'm certain he will."

"But it's all so new," he heard himself say. "It's never been done before. Think of it—a manned rocket going up tonight to build the first space station. Good lord, it can't be done, it doesn't exist, there's no rocket, no proving ground, no take-off time, no technicians. For that matter, I don't even have a son

Copyright © 1956 by Ray Bradbury.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

named Bob. The whole thing's too much for me!"

"Then what are you doing out here, staring?"

He shook his head. "Well, late this morning, walking to the office, I heard someone laugh out loud. It shocked me, so I froze in the middle of the street. It was *me*, laughing! Why? Because finally I really *knew* what Bob was going to do tonight; at last I *believed* it. Holy is a word I never use, but that's how I felt stranded in all that traffic. Then, middle of the afternoon I caught myself humming. You know the song. 'A wheel in a wheel. Way in the middle of the air.' I laughed again. The space station, of course, I thought. The big wheel with hollow spokes where Bob'll live six or eight months, then get along to the moon. Walking home, I remembered more of the song. 'Little wheel run by faith, Big wheel run by the grace of God.' I wanted to jump, yell, and flame-out myself!"

His wife touched his arm. "If we stay out here, let's at least be comfortable."

They placed two wicker rockers in the center of the lawn and sat quietly as the stars dissolved out of darkness in pale crushings of rock salt strewn from horizon to horizon.

"Why," said his wife, at last, "it's like waiting for the fireworks at Sisley field every year, isn't it?"

"Bigger crowd tonight . . ."

"I keep thinking—a billion people watching the sky right now, their mouths all open at the same time."

They waited, feeling the earth move under their chairs.

"What time is it now?"

"Eleven minutes to eight."

"You're always right; there must be a clock in your head."

"I can't be wrong, tonight. I'll be able to tell you one second before they blast off. Look! The ten-minute warning!"

On the western sky they saw four crimson flares open out, float shimmering down the wind above the desert, then sink silently to the extinguishing earth.

In the new darkness the husband and wife did not rock in their chairs.

After a while he said, "Eight minutes." A pause. "Seven minutes." What seemed a much longer pause. "Six . . ."

His wife, her head back, studied the stars immediately above her and murmured, "Why?" She closed her eyes. "Why the rockers, why tonight? Why all this? I'd like to know."

He examined her face, pale in the vast powdering light of the Milky Way. He felt the stirring of an answer, but let his wife continue.

"I mean it's not that old thing again, is it, when people asked why men climbed Mt. Everest and they said, 'because it's there?' I never understood. That was no answer to me."

Five minutes, he thought. Time ticking . . . his wrist watch . . . a wheel in a wheel . . . little

THE END OF THE BEGINNING

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wheel run by . . . big wheel run by . . . way in the middle of . . . four minutes! . . . The men snug in the rocket by now, the hive, the control board flickering with light . . .

His lips moved.

"All I know is it's really the end of the beginning. The Stone Age, Bronze Age, Iron Age; from now on we'll lump all those together under one big name for when we walked on Earth and heard the birds at morning and cried with envy. Maybe we'll call it the Earth Age, or maybe the Age of Gravity. Millions of years we fought gravity. When we were amoebas and fish we struggled to get out of the sea without gravity crushing us. Once safe on the shore we fought to stand upright without gravity breaking our new invention, the spine, tried to walk without stumbling, run without falling. A billion years Gravity kept us home, mocked us with wind and clouds, cabbage moths and locusts. That's what's so god-awful big about tonight . . . It's the end of old man Gravity and the age we'll remember him by, for once and all. I don't know where they will divide the ages, at the Persians, who dreamt of flying carpets, or the Chinese, who all unknowing celebrated birthdays and New Years with strung ladyfingers and high skyrockets, or some minute, some incredible second in the next hour. But we are in at the end of a billion years trying, the end of something long and to us humans, anyway, honorable."

Three minutes . . . two minutes fifty-nine seconds . . . two minutes, fifty-eight seconds . . .

"But," said his wife, "I still don't know why."

Two minutes, he thought. *Ready? Ready? Ready?* The far radio voice calling. *Ready! Ready! Ready!* The quick, faint replies from the humming rocket. *Check! Check! Check!*

Tonight, he thought, even if we fail with this first, we'll send a second and a third ship and move on out to all the planets and later, all the stars. We'll just keep going until the big words like immortal and forever take on meaning. Big words, yes, that's what we want. Continuity. Since our tongues first moved in our mouths we've asked, What does it all mean? No other question made sense, with death breathing down our necks. But just let us settle in on ten thousand worlds spinning around ten thousand alien suns and the question will fade away. Man will be endless and infinite, even as space is endless and infinite. Man will go on, as space goes on, forever. Individuals will die as always, but our history will reach as far as we'll ever need to see into the future, and with the knowledge of our survival for all time to come, we'll know security and thus the answer we've always searched for. Gifted with life, the least we can do is preserve and pass on the gift to in-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

finity. That's a goal worth shooting for.

The wicker chairs whispered ever so softly on the grass.

One minute.

"One minute," he said aloud.

"Oh!" His wife moved suddenly to seize his hands. "I hope that Bob . . ."

"He'll be all right!"

"Oh, God, take care . . ."

Thirty seconds.

"Watch now."

Fifteen, ten, five . . .

"Watch!"

Four, three, two, one.

"There! There! Oh, there, there!"

They both cried out. They both stood. The chairs toppled back, fell flat on the lawn. The man and his wife swayed, their hands struggled to find each other, grip, hold. They saw the brightening color in the sky and, ten seconds later, the great uprising comet burn the air, put out the stars, and rush away in fire flight to become another star in the returning profusion of the Milky Way. The man and wife held each other as if they had stumbled on the rim of an incredible cliff that faced an abyss so deep and dark there seemed no end to it. Staring up, they heard themselves sobbing and crying. Only after a long time were they able to speak.

"It got away, it did, *didn't* it?"

"Yes . . ."

"It's all right, isn't it?"

"Yes . . . yes . . ."

"It didn't fall back . . . ?"

"No, no, it's all right, Bob's all right, it's all right."

They stood away from each other at last.

He touched his face with his hand and looked at his wet fingers. "I'll be damned," he said, "I'll be damned."

They waited another five and then ten minutes until the darkness in their heads, the retina, ached with a million specks of fiery salt. Then they had to close their eyes.

"Well," she said, "now let's go in."

He could not move. Only his hand reached a long way out by itself to find the lawn-mower handle. He saw what his hand had done and said, "There's just a little more to do . . ."

"But you can't see."

"Well enough," he said "I must finish this. Then we'll sit on the porch awhile before we go inside."

He helped her put the chairs on the porch and sat her down and then walked back out to put his hands on the guide bar of the lawn mower. The lawn mower. A wheel in a wheel. A simple machine which you held in your hands, which you sent on ahead with a rush and a clatter while you walked behind with your quiet philosophy. Racket, followed by warm silence. Whirling wheel, then soft football of thought.

I'm a billion years old, he told himself; I'm one minute old. I'm one inch, no, then thousand *miles*, tall. I look down and can't

THE END OF THE BEGINNING

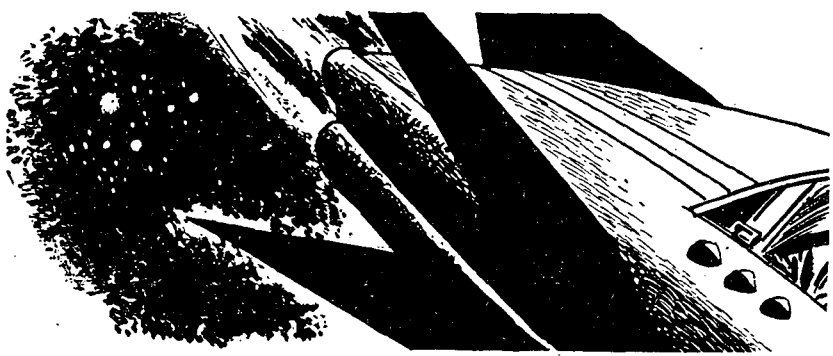
(Continued on page 86)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

To escape from Mars, all Clayton had to do was the impossible. Break out of a crack-proof exile camp—get onto a ship that couldn't be boarded—smash through an impenetrable wall of steel. Perhaps he could do all these things, but he discovered that Mars did evil things to men; that he wasn't even Clayton any more. He was only—

THE MAN WHO HATED MARS

By RANDALL GARRETT



"I WANT you to put me in prison!" the big, hairy man said in a trembling voice.

He was addressing his request to a thin woman sitting behind a desk that seemed much too big for her. The plaque on the desk said:

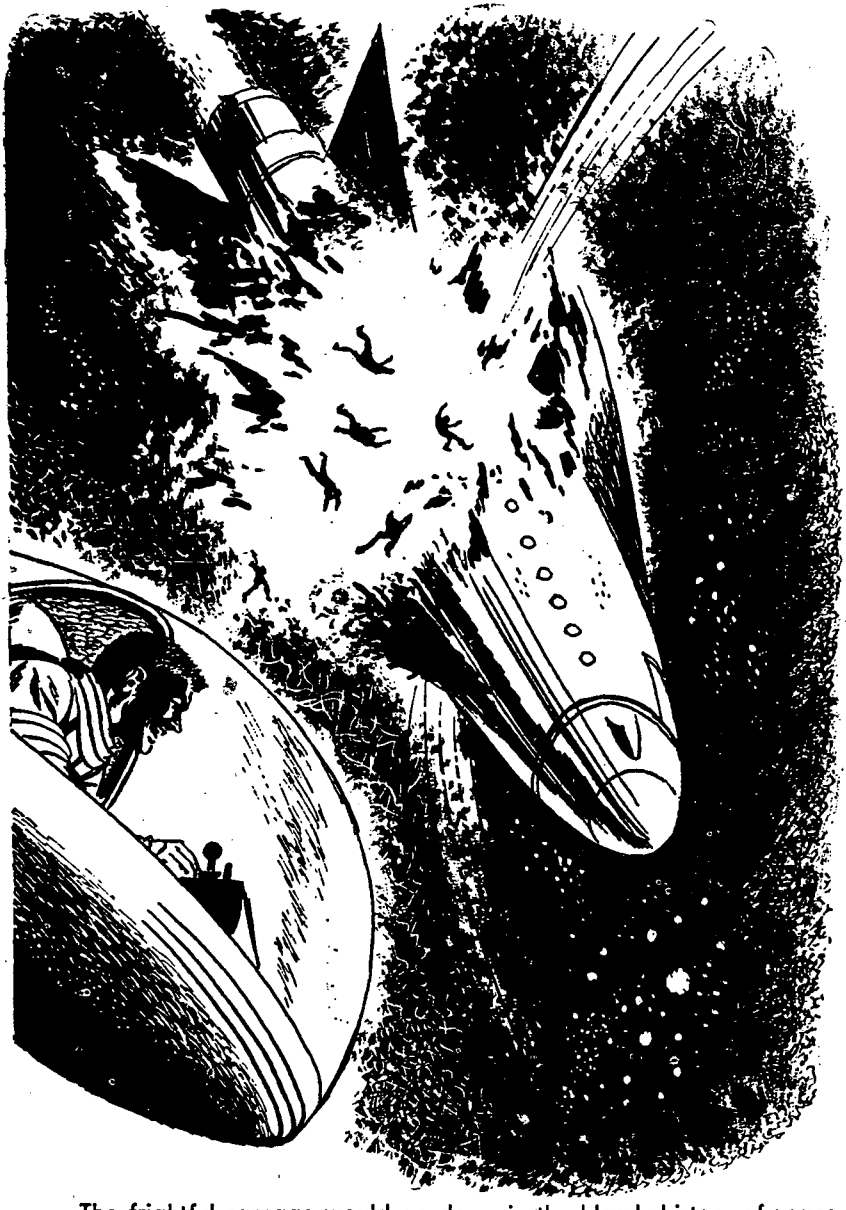
LT. PHOEBE HARRIS
TERRAN REHABILITATION SERVICE

Lieutenant Harris glanced at the man before her for only a moment before she returned her eyes to the dossier on the desk; but long enough to verify the impression his voice had given. Ron Clayton was a big, ugly, cowardly, dangerous man.

He said: "Well? Dammit, say something!"

The lieutenant raised her eyes again. "Just be patient until I've read this." Her voice and eyes were expressionless,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



The frightful carnage would go down in the bloody history of space.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but her hand moved beneath the desk.

Clayton froze. *She's yellow!* he thought. She's turned on the trackers! He could see the pale greenish glow of their little eyes watching him all around the room. If he made any fast move, they would cut him down with a stun beam before he could get two feet.

She had thought he was going to jump her. *Little rat!* he thought, *somebody ought to slap her down!*

He watched her check through the heavy dossier in front of her. Finally, she looked up at him again.

"Clayton, your last conviction was for strongarm robbery. You were given a choice between prison on Earth and freedom here on Mars. You picked Mars."

He nodded slowly. He'd been broke and hungry at the time. A sneaky little rat named Johnson had bilked Clayton out of his fair share of the Corey payroll job, and Clayton had been forced to get the money somehow. He hadn't mussed the guy up much; besides, it was the sucker's own fault. If he hadn't tried to yell—

Lieutenant Harris went on: "I'm afraid you can't back down now."

"But it isn't fair! The most I'd have got on that frame-up would've been ten years. I've been here fifteen already!"

"I'm sorry, Clayton. It can't be done. You're here. Period. Forget about trying to get back. Earth doesn't want you." Her voice sounded choppy, as though she were trying to keep it calm.

Clayton broke into a whining rage. "You can't do that! It isn't fair! I never did anything to you! I'll go talk to the Governor! He'll listen to reason! You'll see! I'll—"

"Shut up!" the woman snapped harshly. "I'm getting sick of it! I personally think you should have been locked up—permanently. I think this idea of forced colonization is going to breed trouble for Earth someday, but it is about the only way you can get anybody to colonize this frozen hunk of mud.

"Just keep it in mind that I don't like it any better than you do—*and I didn't strongarm anybody to deserve the assignment!* Now get out of here!"

She moved a hand threateningly toward the manual controls of the stun beam.

Clayton retreated fast. The trackers ignored anyone walking away from the desk; they were set only to spot threatening movements toward it.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Outside the Rehabilitation Service Building, Clayton could feel the tears running down the inside of his face mask. He'd asked again and again—God only knew how many times—in the past fifteen years. Always the same answer. No.

When he'd heard that this new administrator was a woman, he'd hoped she might be easier to convince. She wasn't. If anything, she was harder than the others.

The heat-sucking frigidity of the thin Martian air whispered around him in a feeble breeze. He shivered a little and began walking toward the recreation center.

There was a high, thin piping in the sky above him which quickly became a scream in the thin air.

He turned for a moment to watch the ship land, squinting his eyes to see the number on the hull.

Fifty-two. Space Transport Ship Fifty-two.

Probably bringing another load of poor suckers to freeze to death on Mars.

That was the thing he hated about Mars—the cold. The everlasting damned cold! And the oxidation pills; take one every three hours or smother in the poor, thin air.

The government could have put up domes; it could have put in building-to-building tunnels, at least. It could have done a hell of a lot of things to make Mars a decent place for human beings.

But no—the government had other ideas. A bunch of bigshot scientific characters had come up with the idea nearly twenty-three years before. Clayton could remember the words on the sheet he had been given when he was sentenced.

"Mankind is inherently an adaptable animal. If we are to colonize the planets of the Solar System, we must meet the conditions on those planets as best we can.

"Financially, it is impracticable to change an entire planet from its original condition to one which will support human life as it exists on terra.

"But man, since he is adaptable, can change himself—modify his structure slightly—so that he can live on these planets with only a minimum of change in the environment."

So they made you live outside and like it. So you froze and you choked and you suffered.

Clayton hated Mars. He hated the thin air and the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cold. More than anything, he hated the cold.

Ron Clayton wanted to go home.

The Recreation Building was just ahead; at least it would be warm inside. He pushed in through the outer and inner doors, and he heard the burst of music from the jukebox. His stomach tightened up into a hard cramp.

They were playing Heinlein's *Green Hills of Earth.*

There was almost no other sound in the room, although it was full of people. There were plenty of colonists who claimed to like Mars, but even they were silent when that song was played.

Clayton wanted to go over and smash the machine—make it stop reminding him. He clenched his teeth and his fists and his eyes and cursed mentally. *God, how I hate Mars!*

When the hauntingly nostalgic last chorus faded away, he walked over to the machine and fed it full of enough coins to keep it going on something else until he left.

At the bar, he ordered a beer and used it to wash down another oxidation tablet. It wasn't good beer; it didn't even deserve the name. The atmospheric pressure was so low as to boil all the carbon dioxide out of it, so the brewers never put it back in after fermentation.

He was sorry for what he had done—really and truly sorry. If they'd only give him one more chance, he'd make good. Just one more chance. He'd work things out.

He'd promised himself that both times they'd put him up before, but things had been different then. He hadn't really been given another chance, what with parole boards and all.

Clayton closed his eyes and finished the beer. He ordered another.

He'd worked in the mines for fifteen years. It wasn't that he minded work really, but the foreman had it in for him. Always giving him a bad time; always picking out the lousy jobs for him.

Like the time he'd crawled into a side-boring in Tunnel 12 for a nap during lunch and the foreman had caught him. When he promised never to do it again if the foreman wouldn't put it on report, the guy said, "Yeah. Sure. Hate to hurt a guy's record."

Then he'd put Clayton on report anyway. Strictly a rat.

Not that Clayton ran any chance of being fired; they never fired anybody. But

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

they'd fined him a day's pay. A whole day's pay.

He tapped his glass on the bar, and the barman came over with another beer. Clayton looked at it, then up at the barman. "Put a head on it."

The bartender looked at him sourly. "I've got some soapsuds here, Clayton, and one of these days I'm gonna put some in your beer if you keep pulling that gag."

That was the trouble with some guys. No sense of humor.

Somebody came in the door and then somebody else came in behind him, so that both inner and outer doors were open for an instant. A blast of icy breeze struck Clayton's back, and he shivered. He started to say something, then changed his mind; the doors were already closed again, and besides, one of the guys was bigger than he was.

The iciness didn't seem to go away immediately. It was like the mine. Little old Mars was cold clear down to her core—or at least down as far as they'd drilled. The walls were frozen and seemed to radiate a chill that pulled the heat right out of your blood.

Somebody was playing *Green Hills* again, damn them. Evidently all of his own selections had run out earlier than he'd thought they would.

Hell! There was nothing to do here. He might as well go home.

"Gimme another beer, Mac."

He'd go home as soon as he finished this one.

He stood there with his eyes closed, listening to the music and hating Mars.

A voice next to him said: "I'll have a whiskey."

The voice sounded as if the man had a bad cold, and Clayton turned slowly to look at him. After all the sterilization they went through before they left Earth, nobody on Mars ever had a cold, so there was only one thing that would make a man's voice sound like that.

Clayton was right. The fellow had an oxygen tube clamped firmly over his nose. He was wearing the uniform of the Space Transport Service.

"Just get in on the ship?" Clayton asked conversationally.

The man nodded and grinned. "Yeah. Four hours before we take off again." He poured down the whiskey. "Sure cold out."

Clayton agreed. "It's always cold." He watched en-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

viously as the spaceman ordered another whiskey.

Clayton couldn't afford whiskey. He probably could have by this time, if the mines had made him a foreman, like they should have.

Maybe he could talk the spaceman out of a couple of drinks.

"My name's Clayton. Ron Clayton."

The spaceman took the offered hand. "Mine's Parkinson, but everybody calls me Parks."

"Sure, Parks. Uh—can I buy you a beer?"

Parks shook his head. "No, thanks. I started on whiskey. Here, let me buy you one."

"Well—thanks. Don't mind if I do."

They drank them in silence, and Parks ordered two more.

"Been here long?" Parks asked.

"Fifteen years. Fifteen long, long years."

"Did you—uh—I mean—" Parks looked suddenly confused.

Clayton glanced quickly to make sure the bartender was out of earshot. Then he grinned. "You mean am I a convict? Nah. I came here because I wanted to. But—" He lowered his voice. "—we don't talk about it around here. You know." He gestured with one hand—a gesture that took in everyone else in the room.

Parks glanced around quickly, moving only his eyes. "Yeah. I see," he said softly.

"This your first trip?" asked Clayton.

"First one to Mars. Been on the Luna run a long time."

"Low pressure bother you much?"

"Not much. We only keep it at six pounds in the ships. Half helium and half oxygen. Only thing that bothers me is the oxy here. Or rather, the oxy that *isn't* here." He took a deep breath through his nose tube to emphasize his point.

Clayton clamped his teeth together, making the muscles at the side of his jaw stand out.

Parks didn't notice. "You guys have to take those pills, don't you?"

"Yeah."

"I had to take them once. Got stranded on Luna. The cat I was in broke down eighty some miles from Aristarchus Base and I had to walk back—with my oxy low. Well, I figured—"

Clayton listened to Parks' story with a great show of attention, but he had heard it before. This "lost on the moon" stuff and its variations

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

had been going the rounds for forty years. Every once in a while, it actually did happen to someone; just often enough to keep the story going.

This guy did have a couple of new twists, but not enough to make the story worthwhile.

"Boy," Clayton said when Parks had finished, "you were lucky to come out of that alive!"

Parks nodded, well pleased with himself, and bought another round of drinks.

"Something like that happened to me a couple of years ago," Clayton began. "I'm supervisor on the third shift in the mines at Xanthe, but at the time, I was only a foreman. One day, a couple of guys went to a branch tunnel to—"

It was a very good story. Clayton had made it up himself, so he knew that Parks had never heard it before. It was gory in just the right places, with a nice effect at the end.

"—so I had to hold up the rocks with my back while the rescue crew pulled the others out of the tunnel by crawling between my legs. Finally, they got some steel beams down there to take the load off, and I could let go. I was in the hospital for a week," he finished.

Parks was nodding vaguely. Clayton looked up at the clock above the bar and realized that they had been talking for better than an hour. Parks was buying another round.

Parks was a hell of a nice fellow.

There was, Clayton found, only one trouble with Parks. He got to talking so loud that the bartender refused to serve either one of them any more.

The bartender said Clayton was getting loud, too, but it was just because he had to talk loud to make Parks hear him.

Clayton helped Parks put his mask and parka on and they walked out into the cold night.

Parks began to sing *Green Hills*. About halfway through, he stopped and turned to Clayton.

"I'm from Indiana."

Clayton had already spotted him as an American by his accent.

"Indiana? That's nice. Real nice."

"Yeah. You talk about green hills, we got green hills in Indiana. What time is it?"

Clayton told him.

"Jeez-krise! Ol' spaship takes off in an hour. Ought to have one more drink first."

Clayton realized he didn't

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

like Parks. But maybe he'd buy a bottle.

Sharkie Johnson worked in Fuels Section, and he made a nice little sideline of stealing alcohol, cutting it, and selling it. He thought it was real funny to call it Martian Gin.

Clayton said: "Let's go over to Sharkie's. Sharkie will sell us a bottle."

"Okay," said Parks. "We'll get a bottle. That's what we need: a bottle."

It was quite a walk to the Shark's place. It was so cold that even Parks was beginning to sober up a little. He was laughing like hell when Clayton started to sing.

"We're going over to the Shark's
To buy a jug of gin for Parks!
Hi ho, hi ho, hi ho!"

One thing about a few drinks; you didn't get so cold. You didn't feel it too much, anyway.

The Shark still had his light on when they arrived. Clayton whispered to Parks: "I'll go in. He knows me. He wouldn't sell it if you were around. You got eight credits?"

"Sure I got eight credits. Just a minute, and I'll give you eight credits." He fished around for a minute inside his parka, and pulled out his notecase. His gloved fingers were a little clumsy, but he managed to get out a five and three ones and hand them to Clayton.

"You wait out here," Clayton said.

He went in through the outer door and knocked on the inner one. He should have asked for ten credits. Sharkie only charged five, and that would leave him three for himself. But he could have got ten—maybe more.

When he came out with the bottle, Parks was sitting on a rock, shivering.

"Jeez-krise!" he said. "It's cold out here. Let's get to someplace where it's warm."

"Sure. I got the bottle. Want a drink?"

Parks took the bottle, opened it, and took a good belt out of it.

"Hooh!" he breathed. "Pretty smooth."

As Clayton drank, Parks said: "Hey! I better get back to the field! I know! We can go to the men's room and finish the bottle before the ship takes off! Isn't that a good idea? It's warm there."

They started back down the street toward the spacefield.

"Yep, I'm from Indiana. Southern part, down around

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Bloomington," Parks said. "Gimme the jug. Not Bloomington, Illinois — Bloomington, Indiana. We really got green hills down there." He drank, and handed the bottle back to Clayton. "Pers-nally, I don't see why anybody'd stay on Mars. Here y'are, practic'ly on the equator in the middle of the summer, and it's colder than hell. Brrr!

"Now if you was smart, you'd go home, where it's warm. Mars wasn't built for people to live on, anyhow. I don't see how you stand it."

That was when Clayton decided he really hated Parks.

And when Parks said: "Why be dumb, friend? Why-n't you go home?" Clayton kicked him in the stomach, hard.

"And that, that—" Clayton said as Parks doubled over.

He said it again as he kicked him in the head. And in the ribs. Parks was gasping as he writhed on the ground, but he soon lay still.

Then Clayton saw why. Parks' nose tube had come off when Clayton's foot struck his head.

Parks was breathing heavily, but he wasn't getting any oxygen.

That was when the Big Idea hit Ron Clayton. With a nosepiece on like that, you couldn't tell who a man was. He took another drink from the jug and then began to take Parks' clothes off.

The uniform fit Clayton fine, and so did the nose mask. He dumped his own clothing on top of Parks' nearly nude body, adjusted the little oxygen tank so that the gas would flow properly through the mask, took the first deep breath of good air he'd had in fifteen years, and walked toward the spacefield.

He went into the men's room at the Port Building, took a drink, and felt in the pockets of the uniform for Parks' identification. He found it and opened the booklet. It read:

PARKINSON, HERBERT J.
Steward 2nd Class, STS

Above it was a photo, and a set of fingerprints.

Clayton grinned. They'd never know it wasn't Parks getting on the ship.

Parks was a steward, too. A cook's helper. That was good. If he'd been a jetman or something like that, the crew might wonder why he wasn't on duty at takeoff. But a steward was different.

Clayton sat for several minutes, looking through the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

booklet and drinking from the bottle. He emptied it just before the warning sirens keened through the thin air.

Clayton got up and went outside toward the ship.

"Wake up! Hey, you! Wake up!"

Somebody was slapping his cheeks. Clayton opened his eyes and looked at the blurred face over his own.

From a distance, another voice said: "Who is it?"

The blurred face said: "I don't know. He was asleep behind these cases. I think he's drunk."

Clayton wasn't drunk—he was sick. His head felt like hell. Where the devil was he?

"Get up, bud. Come on, get up!"

Clayton pulled himself up by holding to the man's arm. The effort made him dizzy and nauseated.

The other man said: "Take him down to sick bay, Casey. Get some thiamin into him."

Clayton didn't struggle as they led him down to the sick bay. He was trying to clear his head. Where was he? He must have been pretty drunk last night.

He remembered meeting Parks. And getting thrown out by the bartender. Then what?

Oh, yeah. He'd gone to the Sharks for a bottle. From there on, it was mostly gone. He remembered a fight or something, but that was all that registered.

The medic in the sick bay fired two shots from a hypogun into both arms, but Clayton ignored the slight sting.

"Where am I?"

"Real original. Here, take these." He handed Clayton a couple of capsules, and gave him a glass of water to wash them down with.

When the water hit his stomach, there was an immediate reaction.

"Oh, Christ!" the medic said. "Get a mop, somebody. Here, bud; heave into this." He put a basin on the table in front of Clayton.

It took them the better part of an hour to get Clayton awake enough to realize what was going on and where he was. Even then, he was plenty groggy.

It was the First Officer of the STS-52 who finally got the story straight. As soon as Clayton was in condition, the medic and the quartermaster officer who had found him took him up to the First Officer's compartment.

"I was checking through the stores this morning when I found this man. He was

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

asleep, dead drunk, behind the crates."

"He was drunk, all right," supplied the medic. "I found this in his pocket." He flipped a booklet to the First Officer.

The First was a young man, not older than twenty-eight with tough-looking gray eyes. He looked over the booklet.

"Where did you get Parkinson's ID booklet? And his uniform?"

Clayton looked down at his clothes in wonder. "I don't know."

"You *don't know?* That's a hell of an answer."

"Well, I was drunk," Clayton said defensively. "A man doesn't know what he's doing when he's drunk." He frowned in concentration. He knew he'd have to think up some story.

"I kind of remember we made a bet. I bet him I could get on the ship. Sure—I remember, now. That's what happened; I bet him I could get on the ship and we traded clothes."

"Where is he now?"

"At my place, sleeping it off, I guess."

"Without his oxy-mask?"

"Oh, I gave him my oxidation pills for the mask."

The First shook his head. "That sounds like the kind of trick Parkinson would pull, all right. I'll have to write it up and turn you both in to the authorities when we hit Earth." He eyed Clayton. "What's your name?"

"Cartwright. Sam Cartwright," Clayton said without batting an eye.

"Volunteer or convicted colonist?"

"Volunteer."

The First looked at him for a long moment, disbelief in his eyes.

It didn't matter. Volunteer or convict, there was no place Clayton could go. From the officer's viewpoint, he was as safely imprisoned in the spaceship as he would be on Mars or a prison on Earth.

The First wrote in the log book, and then said: "Well, we're one man short in the kitchen. You wanted to take Parkinson's place; brother, you've got it—without pay." He paused for a moment.

"You know, of course," he said judiciously, "that you'll be shipped back to Mars immediately. And you'll have to work out your passage both ways—it will be deducted from your pay."

Clayton nodded. "I know."

"I don't know what else will happen. If there's a conviction, you may lose your volunteer status on Mars. And

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

there may be fines taken out of your pay, too.

"Well, that's all, Cartwright. You can report to Kissman in the kitchen."

The First pressed a button on his desk and spoke into the intercom. "Who was on duty at the airlock when the crew came aboard last night? Send him up. I want to talk to him."

Then the quartermaster officer led Clayton out the door and took him to the kitchen.

The ship's driver tubes were pushing it along at a steady five hundred centimeters per second squared acceleration, pushing her steadily closer to Earth with a little more than half a gravity of drive.

There wasn't much for Clayton to do, really. He helped to select the foods that went into the automatics, and he cleaned them out after each meal was cooked. Once every day, he had to partially dismantle them for a really thorough going-over.

And all the time, he was thinking.

Parkinson must be dead; he knew that. That meant the Chamber. And even if he wasn't, they'd send Clayton back to Mars. Luckily, there was no way for either planet to communicate with the ship; it was hard enough to keep a beam trained on a planet without trying to hit such a comparatively small thing as a ship.

But they would know about it on Earth by now. They would pick him up the instant the ship landed. And the best he could hope for was a return to Mars.

No, by God! He wouldn't go back to that frozen mudball! He'd stay on Earth, where it was warm and comfortable and a man could live where he was meant to live. Where there was plenty of air to breathe and plenty of water to drink. Where the beer tasted like beer and not like slop. Earth. Good green hills, the like of which exists nowhere else.

Slowly, over the days, he evolved a plan. He watched and waited and checked each little detail to make sure nothing would go wrong. It *couldn't* go wrong. He didn't want to die, and he didn't want to go back to Mars.

Nobody on the ship liked him; they couldn't appreciate his position. He hadn't done anything to them, but they just didn't like him. He didn't know why; he'd *tried* to get along with them. Well, if they didn't like him, the hell with them.

If things worked out the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

way he figured, they'd be damned sorry.

He was very clever about the whole plan. When turnover came, he pretended to get violently spacesick. That gave him an opportunity to steal a bottle of chloral hydrate from the medic's locker.

And, while he worked in the kitchen, he spent a great deal of time sharpening a big carving knife.

Once, during his off time, he managed to disable one of the ship's two lifeboats. He was saving the other for himself.

The ship was eight hours out from Earth and still decelerating when Clayton pulled his getaway.

It was surprisingly easy. He was supposed to be asleep when he sneaked down to the drive compartment with the knife. He pushed open the door, looked in, and grinned like an ape.

The Engineer and the two jetmen were out cold from the chloral hydrate in the coffee from the kitchen.

Moving rapidly, he went to the spares locker and began methodically to smash every replacement part for the drivers. Then he took three of the signal bombs from the emergency kit, set them for five minutes, and placed them around the driver circuits.

He looked at the three sleeping men. What if they woke up before the bombs went off? He didn't want to kill them though. He wanted them to know what had happened and who had done it.

He grinned. There was a way. He simply had to drag them outside and jam the door lock. He took the key from the Engineer, inserted it, turned it, and snapped off the head, leaving the body of the key still in the lock. Nobody would unjam it in the next four minutes.

Then he began to run up the stairwell toward the good lifeboat.

He was panting and out of breath when he arrived, but no one had stopped him. No one had even seen him.

He clambered into the lifeboat, made everything ready, and waited.

The signal bombs were not heavy charges; their main purposes was to make a flare bright enough to be seen for thousands of miles in space. Fluorine and magnesium made plenty of light—and heat.

Quite suddenly, there was no gravity. He had felt nothing, but he knew that the bombs had exploded. He

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

punched the LAUNCH switch on the control board of the lifeboat, and the little ship leaped out from the side of the greater one.

Then he turned on the drive, set it at half a gee, and watched the STS-52 drop behind him. It was no longer decelerating, so it would miss Earth and drift on into space. On the other hand, the lifeship would come down very neatly within a few hundred miles of the spaceport in Utah, the destination of the STS-52.

Landing the lifeship would be the only difficult part of the maneuver, but they were designed to be handled by beginners. Full instructions were printed on the simplified control board.

Clayton studied them for awhile, then set the alarm to waken him in seven hours and dozed off to sleep.

He dreamed of Indiana. It was full of nice, green hills and leafy woods, and Parkinson was inviting him over to his mother's house for chicken and whiskey. And all for free.

Beneath the dream was the calm assurance that they would never catch him and send him back. When the STS-52 failed to show up, they would think he had been lost with it. They would never look for him.

When the alarm rang, Earth was a mottled globe looming hugely beneath the ship. Clayton watched the dials on the board, and began to follow the instructions on the landing sheet.

He wasn't too good at it. The accelerometer climbed higher and higher, and he felt as though he could hardly move his hands to the proper switches.

He was less than fifteen feet off the ground when his hand slipped. The ship, out of control, shifted, spun, and toppled over on its side, smashing a great hole in the cabin.

Clayton shook his head and tried to stand up in the wreckage. He got to his hands and knees, dizzy but unhurt, and took a deep breath of the fresh air that was blowing in through the hole in the cabin.

It felt just like home.

Bureau of Criminal
Investigation
Regional Headquarters
Cheyenne, Wyoming
20 January 2102

To: Space Transport Service
Subject: Lifeship 2, STS-52
Attention Mr. P. D. Latimer

Dear Paul,

I have on hand the copies

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of your reports on the rescue of the men on the disabled STS-52. It is fortunate that the Lunar radar stations could compute their orbit.

The detailed official report will follow, but briefly, this is what happened:

The lifeship landed—or, rather, crashed—several miles west of Cheyenne, as you know, but it was impossible to find the man who was piloting it until yesterday because of the weather.

He has been identified as Ronald Watkins Clayton, exiled to Mars fifteen years ago.

Evidently, he didn't realize that fifteen years of Martian gravity had so weakened his muscles that he could hardly walk under the pull of a full Earth gee.

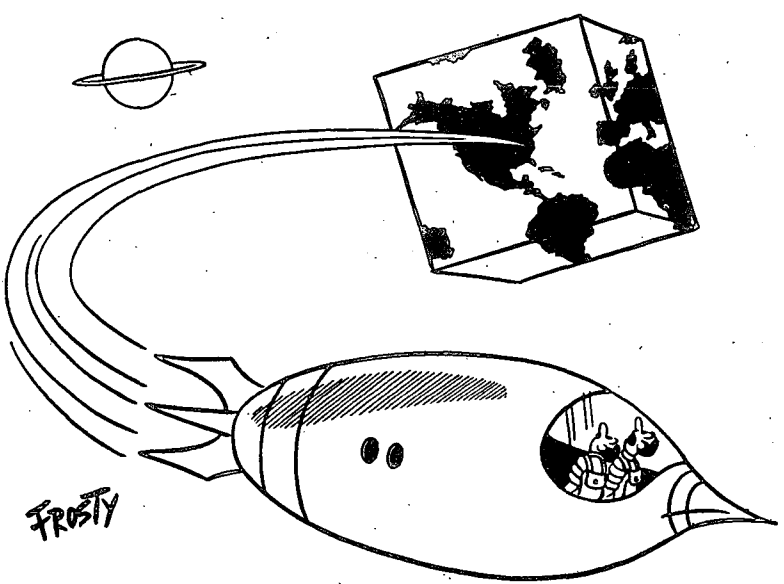
As it was, he could only crawl about a hundred yards from the wrecked lifeship before he collapsed.

Well, I hope this clears up everything.

I hope you're not getting the snow storms up there like we've been getting them.

John B. Remley
Captain, CBI

THE END



"Well—this certainly challenges the credibility of the Columbus theory!"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The BIG BLOW-UP

By DANIEL F. GALOUYE

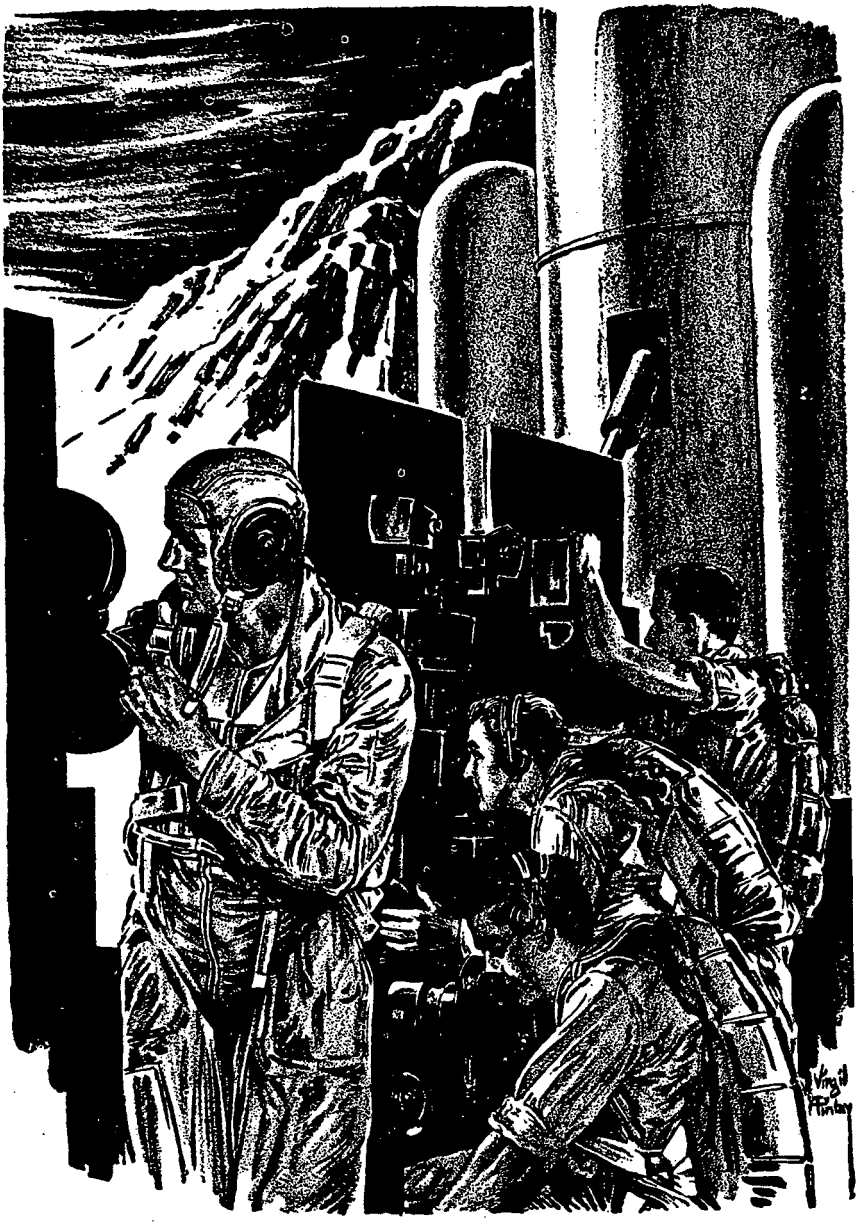
Illustrator FINLAY

Blasts of hellfire exploded outward from a sun in agony, a sun going nova. On the dying planet, the earth scientists teetered on the edge of panic. But the natives waited calmly for He Who Wanders Among the Stars.

WEARILY, Powderkeg struggled to lift itself over the distant range of icy peaks. It finally cleared the obstruction and hung exhaustedly above the saddleback—a flickering, mottled disc of full orange color.

I watched Munrov, the solar-dynamist in charge of Project Flash, as he dominated the plain beyond the ship. Dumpy and with a mat of dense white hair, he was like an excited dwarf racing about among the battery of sun-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

scopes and shouting instructions in his thin, coarse voice.

At the other end of the plateau, an occasional native stirred within his lean-to and wrapped animal hides about his shivering body.

It was a typical morning on Powderkeg II. Except for the primitives, it was just as every other morning had been for the past two weeks—ever since the expedition had made planet.

The natives were something else. They had shown up three days after our arrival, despite assurances from Pre-expedition Survey that there was no advanced life on this world.

My attention was drawn to the suddenly brightening morning sky. The sun was acting up again. It had hurled out another major prominence that outshone even the full disc of the dying star.

Powderkeg was behaving just about as expected. It would go through its mortal agony over the next eighteen days. Then, on the nineteenth day . . . Well, I like to think of it euphemistically:

Perhaps two million years from now some astronomer in Andromeda would watch a pinpoint of light in the vast Milky Way flare up brilliantly, bedimming the billions of stars in its own galaxy.

Walter London stood in the hatch distastefully surveying the dismal landscape. He buttoned his jacket tightly about his neck and came down the ramp into the weak sunlight.

"How's it acting this morning, Banks?" he asked, nodding skyward.

"According to schedule, I suppose."

"Any chance of it going off *before* the nineteen days are up?"

London was a huge, friendly person with a blunt chin and thick brows that gave his face a primitive cast. We got along well together, since this wasn't the first time he had served as pilot and I as security officer on one of Munrov's solar cycle expeditions.

"If it does," I said, smiling, "I wouldn't want to be anywhere around."

He laughed at that. But, apprehensively, he kept Powderkeg in the corner of his eye. "Tell Munrov Group B just reported securing for the night. They'll begin transmitting data in about an hour."

Group B was the second half of Munrov's party. It had been dropped off on the other side of the planet by the auxiliary ship, which had long since returned to Fenlow V.

I had to stand around almost a half hour, watching Munrov flit from one long-snouted instru-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment to another. He was an eternally preoccupied little man whose greeting was always edged with a certain amount of indifference, if not outright disdain.

"All right, Banks," he said finally. "What is it?"

I relayed London's message.

"Very well. Put the data on triple tape when it comes through. And don't disturb us any more than you have to. Anything else?"

I hesitated. "About the natives—"

"Damn it! You're not going to start *that* all over again? There isn't *anything* we can do."

"Then you're going to let them stay here?"

He shrugged. "I know it sounds damned harsh. But that's the way it's got to be."

"You could send London back for a rescue fleet. It's nineteen days to nova—seven to Fenlow, one to muster the fleet, seven back. That leaves a safety margin of four days."

Munrov bristled. "Almost every man in London's crew doubles as a technician in Project Flash. Sending that ship back would mean missing half of the data we came here for!"

"Is that more important than an intelligent race?"

"You can scarcely call them intelligent. They are hardly gregarious and have no means of communicating among themselves—not even a sign language. Anyway, how could we muster them?"

I gestured toward the forest. "The whole surviving population must be concentrated on this little peninsula. It's the only land that hasn't been iced over for the past several thousand years."

The solardynamist was shaking his head obstinately. "We couldn't get them aboard ships without giving them a language impress and explaining what's happening. And, unless they have a basic language of thier own to start out with, an impress treatment would only drive them mad."

"Let's get the ships here first and *then* decide how to get them aboard."

"There'll be no rescue fleet," Munrov reiterated unbudgingly. "For years science has hoped it might stumble on a prenova. By sheer luck, here we are—only fifty million miles from one that's due in nineteen days. I'll not have one minute of one man's time wasted!"

With that, the expedition chief stormed away and I stood there cursing a whole range of things—that the auxiliary ship had to leave *before* we found out there were natives; that man had never solved the riddle of faster-than-light communications, even though he had learned to travel at hyperspeeds; that the demands

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of science had to take priority over simple mercy.

THROUGHOUT the day Powderkeg flaunted its awesome threat of soon-to-be-unleashed solar ferocity. Great rifts appeared again and again in the pallid orange disc, exposing its raging inner regions. It was as though the curtains of hell itself were being drawn open.

As I started out on my security check just before sunset, I imagined it would be a miracle if our hemisphere didn't rotate into the full fury of a fiery nova the next morning.

Halfway to the native encampment, I was overtaken by London. "Mind if I come along?"

"I can't promise any lift out here—unless you enjoy consorting with the doomed."

Of course, he knew I was being facetious. And, as for his real purpose in wanting to come along—he opened his jacket and indicated the inner pouches filled with space ration chocolate.

"Munrov said it would be all right to pass out a few bars, since the metabolism test showed it wouldn't do any harm."

I laughed rudely. "He must have dug damned deep to come up with those sentiments."

London munched on one of the bars. "Oh, he's human—I suppose. After all, he *does* have his orders."

"Which say nothing about sacrificing a whole race."

"Maybe not. But with novas as scarce as they are, chances are it'll be another two thousand years before we run across anything like Powderkeg."

Continuing toward the village, we detoured around a large, rugged outcropping and quite suddenly came upon one of the natives. He was pensively watching the sun ease into the dark silver sea.

He was a tall, white-skinned creature with smoothly etched features that bore a certain mark of nobility rather than the savagery his living conditions suggested. His head was hairless and his brow and skull almost of ponderous proportions. His nose was quite small and his chin negligible. Folded in his lap were hands which possessed only three fingers and a thumb.

Respectfully, he rose and regarded us. Then a subtle, dignified smile formed on his lips.

London made an exemplary gesture of taking a bite out of his chocolate bar. Then he unwrapped another and handed it over to the man.

I wondered for a moment over the lack of hesitancy, the complete absence of suspicion as the native took the offering, returned to the slab and resumed his contemplation on the setting sun.

We went on to the encamp-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment and approached the main communal fire where most of the others were collected in their eternal silence.

Three children came forward, hands extended, and eagerly explored the bulging contours of the pilot's jacket.

London frowned. "How do you suppose they *know* I brought something for them?"

I stared back uncertainly at the outcropping. The solitary native had not come into sight. Nor had we been visible to the others when we gave him the chocolate bar.

"Don't you see?" I explained. "They *must* have some means of communicating!"

Munrov was tied up with data sampling when we returned to the ship. He had already had supper sent in and had posted notice on the hatch of the correlator compartment that he wasn't to be disturbed. I waited outside.

It was well after midnight when he finally stepped into the corridor, bent with fatigue.

"I'm in no condition to listen to any more appeals for the natives," he gruffed at me.

"All I want is permission to try a language impress on one of them."

"Why?"

"Because our test was wrong. They *do* communicate."

"They can't. They have absolutely no ability for matching concept with symbol."

He started to move off but I caught his arm. I told him about the native hidden behind the outcropping and how the other primitives seemed to know instinctively that we had brought candy for them too.

"They must use some form of supersonic contact," I concluded.

"Impossible. That hidden native simply stepped into view and signaled."

"I'm sure he didn't. But even if he did, he *had* to use predetermined symbols. Which proves they *do* communicate and *can* tolerate a language impress."

He looked away wearily. "And so you want to try a semantics transfer?"

I nodded.

"Suppose the concept behind vocal communication is too much for their primitive minds? They'd go off the deep end and we'd have a bunch of otherwise docile natives running amuck on us."

"I'd try it on only one of them and it wouldn't be an oral transfer," I went on eagerly. "There's a dactylology bank in the impress rectifier. We could select a simple eight-finger sign language. I'd take the treatment first."

"Go ahead then," he submitted with a defenseless sigh. "But I

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

don't know what you're trying to prove."

"There's only three days left to send London for a rescue fleet," I explained confidently. "In that time I'm going to convince you those primitives are worth saving."

IT was almost noon the next day when I unbuckled the semantics transfer helmet. The light coming in through the sick bay port blazed into my suddenly unshielded eyes and I realized Powderkeg was putting on another fearsome display.

London relieved me of the headpiece. "How did it come through?"

"Pretty clear," I answered uncertainly, trying to review in an instant my new vocabulary of hand gestures.

He turned off the rectifier. "So much for the easy part. Now's when the fun begins—trying to get one of those natives in here without touching off a first-rate riot. And we don't even have a Morpheus beam to use."

"That one we found by himself yesterday—he might not kick up too much of a fuss. You're still with us, aren't you?"

"Sure. Wouldn't miss out on the rhubarb for anything. But, like Munrov, I'd like to know what it's going to get you."

We started down the corridor. "I'll let you in on something. Munrov has overlooked an obscure section of contact law. It says all possible assistance *has* to be extended wherever and whenever requested by any group in peril."

Climbing down the ramp, I was almost certain the big blow-up had come. Entire sections of Powderkeg's lambent hydrogen surface were convulsing violently and sending out huge arching plumes of incandescent brilliance. They gave the dying star the appearance of a blazing pinwheel.

I cast a desperate glance at the solar survey crew. None of them seemed particularly concerned. So I decided that this, after all, wasn't *it*.

As we continued on toward the native encampment, London asked worrisomely, "What's that escape factor again?"

"A little over eight minutes." That was our safety margin to get back into the ship, clear the surface and slip into subspace. It was all the time we could expect between visual sighting of the blow-up and arrival of the blanket of searing gases.

I began considering plans to lure the native back to the ship without arousing his suspicion or getting his friends hopping mad.

But suddenly a single, fur-wrapped figure was coming across the plain toward us. When

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

he drew closer we saw it was the primitive I had hoped to find.

He stopped a few feet away and flashed a smile of recognition.

Hopefully, London extended a bar of chocolate but withdrew the candy as the native reached for it. When we backed off toward the ship he followed.

I was even more surprised at the docile manner in which he went with us up the ramp, through the hatch and down the passageway into sick bay.

He was sitting on the bunk nibbling his bar of candy when London sneaked up from behind and hit him in the neck with a syringe full of sodium pentothal.

Just as in any kind of learning, the secret of success in semantics transfer is time—time and subliminal repetition. With any race that has a fairly well evolved language pattern of its own, you can pull off an impress treatment in three or four hours. With Pensive One though (that was the name we had decided upon for our contact candidate), I didn't want to take any chances. We set the rectifier for minimum transfer speed and waited out the full twelve hours.

So it wasn't until after midnight that I removed the impress helmet and sat on the side of the bunk searching the native's face for signs of awakening.

London paced in the small compartment. "I don't like it."

"What?" I watched the primitive's eyelids quiver under the impact of our voices.

"These natives—there's something damned unusual about them."

"That's what I've been trying to tell Munrov."

"I don't like their complete lack of suspicion—the way they're taking us in stride."

"Like accepting that candy without any misgivings, gulping it down without even sniffing it," I proposed.

"Or the way Pensive One followed us into the ship without showing any fear at all."

The primitive opened his eyes and looked slowly around the compartment before sitting up.

"For my money," I said finally, "these boys deserve to be studied as much as that nova out there. The important thing now, if the language transfer worked, is to see that this fellow makes a direct plea for rescue."

I gave him the sign language symbol for myself—rigid index finger elevated.

He hesitated, but only briefly, then alertly came up with his own designation—finger tips pressed against his temples.

I cast a hopeful glance at London. Then I made stiff steeples of all my fingers before sending the right index in a swooping motion

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to touch the clenched fist of my left hand.

Pensive One responded with a series of gestures that was almost the reverse of what I had done, adding several flourishes of his own.

"What does he say?" London asked impatiently.

"I told him we had come from the sky to visit his people and he answered that they're glad we're here. From what he says, I gather some of them were watching from the forest when our two ships first landed."

Pensive One had a few normal questions to ask—such as who we were, where we had come from and how we had gotten there. The basic answers were, of course, inherent in the wealth of data that had been transferred during the impress treatment. Concrete replies, however, served to elevate the information to his conscious plane.

Then I got down to cases with a critical question. "How many are your people?"

If he could answer that one, it would mean his primitive mind had the basic ability to understand the mathematics to which it had been exposed during semantics transfer.

"In Pensive One's tribe?" he answered.

"How many tribes are there?"

"Three."

"And how many people altogether?"

His hands hung there a moment, then he flashed the reply. "About twelve hundred."

I turned aside and busied myself with mental calculations. In order to avoid any possible conflict with established mathematical concepts, it was a thumb rule of semantics transfer that all primitive races be impressed with numerical systems to match their digital characteristics. Since Pensive One had eight fingers, we had selected a sign language with an octaval system, as contrasted to our own decimal system. So, any figure he came up with above the number seven would have to be transposed mathematically.

But suddenly he moved in front of me, his hands flitting in communicative gestures. "That would be about nine hundred and sixty of your numbers."

I drew back in stark surprise.

London seized my arm. "What's he say? What's the matter?"

"He can transform figures! He probably knows as much arithmetic as we do!"

I continued even more directly with the native. "A great disaster awaits your people," I told him in the stilted phrases of the sign language, repeating the words orally for London's benefit.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Yes, we know." Pensive One's fingers moved sluggishly, as though expressing hallowed thoughts. "Our sun nears its death."

I straightened, numbly translating the native's expressions.

The pilot's sudden laughter snapped me out of my amazement. "What's so funny?" I asked.

"It took us hundreds of years with all kinds of gimmicks to learn how to tell when there's going to be a big blow-up. And these backwood Joes know it *instinctively!*"

"How do you know death awaits your sun?" I asked the primitive.

"We just know it."

I glanced away for an indecisive moment. "Your people can be saved if you do what we tell you. You must come and ask our Superior One for help. I will act as your interpreter."

He placed his hands calmly over mine to stop their motion. Then he went on with his own signals:

"There is no need for that. He Who Wanders Among the Stars will save us."

I drew back exasperatedly. This was no time for blind superstition and false hope. "You *must* do what I tell you!"

Calmly, he repeated his refusal.

"What's he say?" London demanded. "What's going on?"

I brought him up to date.

And, while I did, Pensive One strode serenely from the compartment and out of the ship.

I OVERTOOK the expedition director on his way to the cluster of instruments that morning.

"Really, Banks," he protested resentfully, "this is going to be our busiest day."

"We tried language impress on one of the natives last night. It took."

"Well, good for you," he said cynically. "Now suppose you take your primitive friend aside and have a nice little chat with him—say for a couple of days. That way everybody will stay out of everybody else's hair."

"If the native we tried is average, then this could be the most intelligent primitive race ever discovered. They even know mathematics."

Annoyed, Munrov hooked his thumbs under his holster belt. He and I were the only ones who were armed.

"How could they accumulate and pass on knowledge," he asked skeptically, "without a language?"

"I don't know what the explanation is. But I do know we can't sacrifice this race. You've got until day after tomorrow to send London for a rescue fleet."

"Rundmire, our thermopathologist," he began patiently, "only

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

yesterday formed a theory for possible control of a nova through hyperfrequency bombardment from subspace. With more observation here, he may get a clue as to how to apply his theory. Do you want me to take him from his work?"

There was no denying the logic of his argument. But still I couldn't quite balance *possible* danger to some world in the distant future against *imminent* peril to these helpless natives.

"If that bunch out there could offer some noteworthy contribution to galactic culture," Munrov went on, "I might consider sacrificing our work to save them. But it would have to be a damned significant contribution."

"They *know* about the nova!" I blurted hopefully. "The native we communicated with—I told him there was a disaster coming and he said yes, we know our sun is near death! Doesn't *that* suggest they might have something to offer?"

Munrov laughed stiffly. "It suggests that when you mentioned disaster, your native put two and two together. After all, we've been pointing twenty-three tubes at this star twelve hours a day for over two weeks. He probably thinks we're 'killing' it."

London was busy most of the day running his forth-eight-hour readiness check on the ship's powerplant and control system. So I didn't get a chance to see him until late that afternoon.

Security being only a token assignment on this expedition, I spent part of the day looking unsuccessfully for Pensive One and the rest soaking up what little warmth Powderkeg was still managing to put out.

Lying on a stone slab a few feet from the ship, I dozed off and was immediately swept up in a terrifying nightmare.

Blow-up came—fiercely, devastatingly. For a few horrifying seconds I watched the sun disintegrate, sending out searing blasts of hellfire in slow-motion agony. But my feet were paralyzed and I couldn't join the rush for the ship. Then suddenly my legs were pumping frantically but not carrying me anywhere.

Meanwhile, Munrov, London and the others were packed tightly on the ramp trying to get into the ship. Only, the hatch was stuck.

Then came the natives, wave after wave of them, trampling over me in their savage dash for the ship. No longer speechless, every last one of them was frenziedly shouting in pure Galactic English, "Save me! Save me!"

Jolting awake, I wiped perspiration from my face and saw that the dream had probably been stimulated by another outburst of raw energy from Powderkeg.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

For a moment, as I tried to bring my eyes to focus, it seemed that the setting sun had actually split in half. But it was only an illusion caused by two tremendously bright prominences that appeared as twin tongues of fire jutting out into space.

London was standing there. "Easy on the panic button, it isn't Judgment Day yet."

He motioned toward the battery of instruments where the operators were going unconcernedly about their tasks.

But I was staring across the plain at the makeshift native village. There were twice as many lean-tos, double the former number of communal fires.

"They've been streaming in for the past hour," London explained.

"Let's go take a look," I proposed. "I want to have a talk with Pensive One anyway."

SURPRISINGLY, the natives did not run forward into the twilight begging for candy. And I wondered how they knew we hadn't brought any along.

As we pressed forward, they made room for us around the central fire. I searched the scores of expressionless faces but failed to find Pensive One.

"Either he's at one of the other fires or he's out there among the rocks," I suggested. "Let's split up and find him."

"I'll scout around the camp," London volunteered.

As I had more than half expected, the native was seated in solitude on his lonely slab, watching the planet's single moon lift itself out of the sea. He rose and offered the simple greeting of his newly acquired sign language.

"Where are all these people coming from?" I worked my hands slowly so he could understand the gestures despite the scant light.

"They are the second tribe," he said proudly. "The third will be here tomorrow."

"Why are they coming?"

"To wait for Him Who Wanders Among the Stars."

I felt a deep compassion for this simple primitive and his people whose abiding faith would collapse so bitterly at that last moment of doom.

After letting my hands rest idly by my side for a moment, I asked, "How do you know the third tribe will be here tomorrow?"

But it was obvious his attention had been captured by something other than the question. He drew up tensely and signaled, "Why do you not go help your friend?"

"What makes you think he needs help?"

"He has hurt himself, hasn't he? I do not understand. Why

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

did he not avoid the injury?"

Before I could answer his puzzling questions, London's voice, crying out my name, came weakly on the night air. It was tinged with pain.

I stood there confounded for a moment, then raced off across the plain with Pensive One following close behind.

We found London not too far from one of the fires. He was sitting on the rock-strewn ground and gripping his foot. Several natives were crowded curiously around him.

"I think I fixed up the ankle," he explained with an apologetic half grin.

"Serious?"

"I don't believe so. Nothing that a couple of hours under the lesion negator won't erase. But I'm afraid you'll have to get me back to sick bay."

Relieved that it was nothing critical, I turned anxiously toward Pensive One. "How did you know this had happened?"

He signaled back casually, "I watched it through the eyes of those who were nearby."

"You mean you got it *directly from their minds?*" My fingers were tripping over themselves with excitement.

His hands produced an affirmative gesture.

"Cut out the finger talk," the pilot remonstrated, "and help me get to the ship."

"London!" I exclaimed triumphantly. "Munrov *has to* save these people! They're all *pure telepaths*!"

At sick bay I helped London get his foot propped up under the lesion negator. Then I hurried over to the wardroom to look for Munrov. He had finished his supper, however, and was already locked away with the correlator Banks.

I banged on the hatch.

"Go away." His voice came weakly through the metal panel.

Cupping my mouth against the door, I shouted, "You said these natives didn't have anything to contribute. Well, they have!"

I banged again and he finally opened the hatch. His stare conveyed severe annoyance. "What's this all about?"

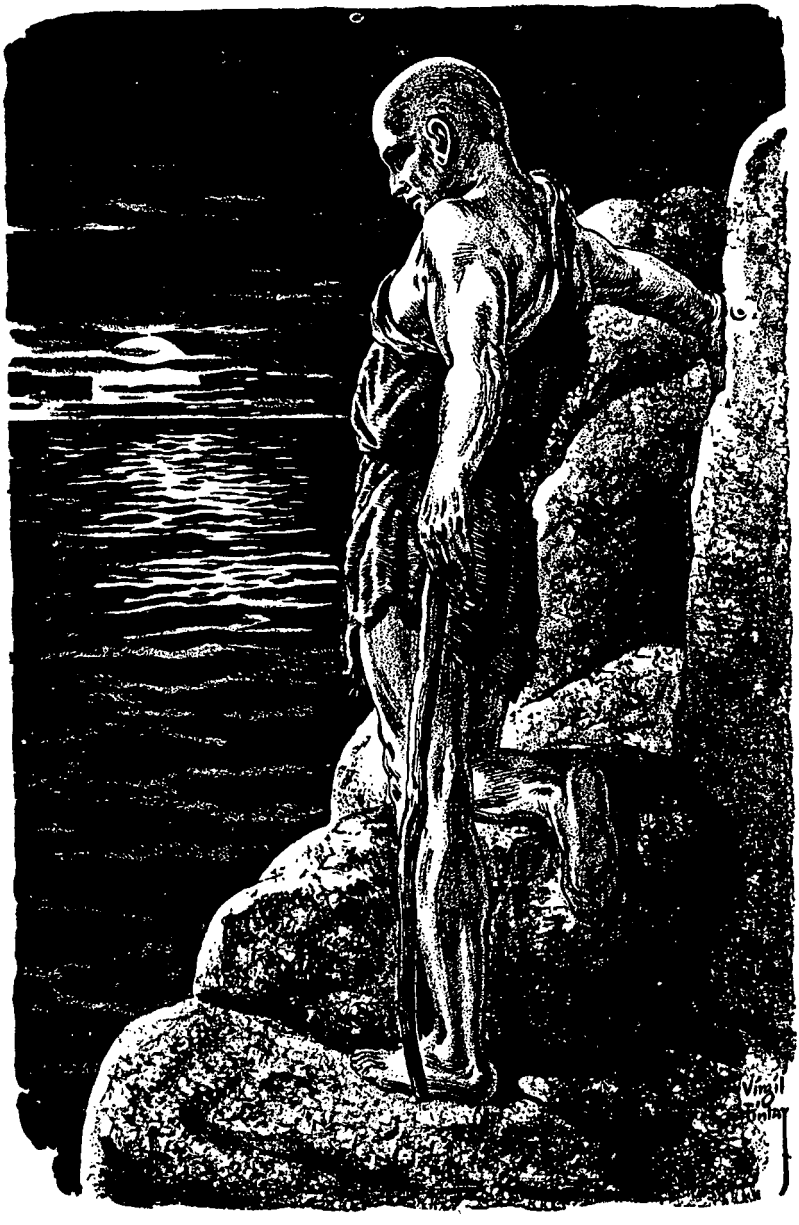
"You were right. They *don't* use language symbols. They don't need them. They communicate by direct thought transferrence!"

He went back into the compartment and I followed, trying to give a rational account of what had happened at the native encampment.

"Don't you see what this means?" I asked finally. "These few hundred natives, given the right environment, could multiply into thousands, millions! They—"

"That would logically seem to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

follow," he cut me short indifferently.

"But a telepathic race!" I emphasized. "Think of the instances of *accidental* telepathy on record. They prove direct transfer of thought is instantaneous over *any* distance!"

He looked up patronizingly and I pressed my argument: "There isn't a planet or a ship in the federation that hasn't suffered from total lack of communications. All we have is a packet system on an interstellar plane, no better than the days of sailing ships on Earth. But even a child could see what it would mean if a *naturally* telepathic race was integrated into galactic society—with representatives at every world capital, aboard every ship!"

Munrov lowered himself listlessly into a chair. "I figured they might have extrasensory talents. I hoped not though—for my own peace of mind."

"You mean you actually *suspected* they were telepathic?"

"Not until you told me how the others seemed to know instinctively that you'd given chocolate to the one by the rocks."

"Then you *will* send London to get a rescue fleet?" I asked, relieved. "Day after tomorrow is the last day he can leave and still make it to Fenlow and back before the blow-up. But I don't think we should lose any—"

Munrov, however, was shaking his head. "We won't send London anywhere."

I exploded. "Well, why in hell not?"

"Four days ago Kaufmann, our hydrogenologist, found out Powderkeg's taking a short cut through the final phase. The big blow-up won't come *seventeen days* from now. It's due *day after tomorrow*. Powderkeg would have novaed even before London could have gotten to Fenlow, much less returned with a mercy party."

For almost a minute I stood staring grimly at him. "Why didn't you tell us?"

"I know my crew. I knew that as the blow-up neared they'd become tenser, less efficient. I wanted to avoid that. If it's going to be impossible to do anything for the natives, then the least we can salvage is a successful expedition."

He rose and walked sluggishly over to the desk, fidgeted with a tape container. "If only those natives had showed themselves *before* the auxiliary ship left! Then there would have been enough time to get a rescue fleet here, even taking the premature eruption into account."

"Can't we bring *any* of them back?" I pleaded.

"We can and we will. By abandoning as much equipment as possible and by bumping our heads against the load factor

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ceiling, we may be able to save perhaps twenty of them."

He sensed my disappointment and spread his hands helplessly. "That's the best we can do."

Then he paused uncertainly. "No—not quite the best. A couple of children could fit in under my weight allotment, I suppose."

"You mean you'd *stay here?*"

"Why not?" He offered a spiritless smile. "I'll be the first human ever to see a nova close enough to touch it."

FOR that matter, my weight allotment could accommodate another pair of children, bringing to twenty-four the total number of natives who could be saved.

That was the horribly fascinating thought that stuck with me throughout the night as I tossed sleeplessly on my bunk. A thousand times I reached a decision and lay peacefully back on the pad. But each time my resolve was shattered by the thought of standing on the naked planet, helpless before the fiery wrath of a raw nova.

It wasn't until I went outside and watched Powderkeg rise above the frigid peaks that I finally distilled the true values. I was one among billions whose loss would never be noticed. On the other hand, the worth of any one of these natives to galactic culture and progress was incalculable.

And some day, when vital messages were spanning the farthest reaches of the galaxy with the speed of thought, they might name a system after me—if I didn't change my decision again during the thirty hours that remained before blow-up.

Surprisingly, the sun seemed exceptionally subdued on Doomsday Eve. Its disc was an even blend of pastel orange with only a few negligible splotches of dark brown. Only minor prominences were visible.

Munrov and Kaufmann broke the news of tomorrow's nova to the others at breakfast. They took it calmly enough. There was a tense stare here and there, punctuated by the sound of a fork clattering on the floor.

Then the expedition director filled us in on the details—blow-up at ten the next morning, plus or minus one hour. Finally he released his double-duty technicians back to their responsibilities as ship's crew members so London could lift off at noon and retrieve Group B from the other side of the planet.

I watched blastoff, then gave a hand with dismantling the various solarscopes and collecting their permanent data cartridges. Several hours later, after seeing what must have been the third tribe arriving to join the native encampment, I trudged off across the plain. I wanted to find Pen-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sive One and make sure he'd be among those saved.

Munrov overtook me halfway there and laid a friendly hand on my shoulder.

"You don't have to do it, you know," he said smiling.

"Do what?"

"Sacrifice yourself to save a couple of backplanet Joes."

"How did you know I had that in mind?"

"It's written pretty plainly on your face. Look, Banks—I'm almost twice your age. With me it doesn't make any difference. Of course, you can do what you want. But it would be my guess that you'd serve a better purpose by going back with those twenty-eight natives and looking out for their interest."

I glanced up sharply. "Twenty-*eight?*"

"Kaufmann, Prescott and Windmire also decided they're too attached to this place to leave."

I felt a sudden swell of pride for these eminent scientists in Munrov's crew—pride for them and the whole of humanity which they represented.

"Make it thirty natives," I said determinedly. "I like it here too."

And I suspected that by blast-off time we might have trouble getting enough crewmen aboard to take the ship back.

The deafening roar of rockets suddenly shook the plain and we watched London returning with the second half of the expedition.

With his customary precision, he lowered the ship delicately toward the surface. It touched down, then heaved violently. Fire belched from its side as landing struts crunched with a sickening sound. When the dust cleared the craft was tilted at a precarious angle, its main tube ruptured in a great mass of twisted, jagged metal.

Dismally, Munrov said, "It looks as though we've *all* become attached to this place—permanently."

Powderkeg was a magnificently frightening spectacle as it rose in perverted majesty the next morning and sent its now weak, now fierce rays down on our group, huddled about the useless ship.

Its entire surface boiled and heaved vehemently, spattering the darkened space around it with great splashes of liquid radiance that fell back down ever so slowly. It was like watching thick bubbles bursting in the mouth of an angry caldron.

Blow-up was less than four hours off. London and some of his crew, exhausted from a frantic night of work, were asleep on the cold, rocky plain. Refusing to accept doom, they had labored from twilight until dawn, trying to squeeze a thirty-day repair job

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

into a few hours. They didn't give up, however, until their hopeless effort to right the ship with a pair of tractor beams backfired and sent the huge craft crashing down on its side.

Watching the sun climb torturously into the sky, I tried to shake off my desperation with the fascinating realization that, for billions of years, this same sun had risen dutifully every day —on schedule. But now it was all over. For, before it could reach the zenith on this, its last cycle, it would disintegrate in a tremendous stellar explosion that would reduce every body in its system to molten rock and swirling gas.

I rose, thrust my hands in my pockets and walked away from Munrov and his grimly silent group. Out on the plain, I paused and stared at the native village.

All the communal fires were out and the lean-tos had been leveled. The primitives, in several scraggly lines, were streaming out onto the plain.

Puzzlement broke through the pall of horror that lay over my senses and, for a brief, impersonal moment, I wondered what they were doing. Then I remembered Pensive One's blinding faith—his belief that their god would pluck them from the maw of death.

There was a violent paroxysm of light and I hit the ground,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rolled over and tried to wedge myself under a boulder. Terrified, I glanced skyward. The sun was still there. Only, its entire surface seemed to have leaped outward several million miles. But now it was falling back in on itself. There was no doubt that Powderkeg was in its final convulsions.

I rose, not bothering to brush myself off, and stood there trembling. The natives, however, had continued their trek out upon the plain, unconcerned. And now they were collecting into five groups.

There was a tapping on my shoulder and I must have jumped eight feet. I whirled and saw London standing there. Normally, he would have been guffawing at my reaction. Now, he had only the look of pallid death on his face.

He glanced at his variable watch, synchronized with the day-night cycle of the planet. "Two hours left."

"Plus or minus one," I reminded.

"All right then," he conceded dully. "One to three hours. How do you feel?"

"Just great," I answered, poker-faced.

"We'll never know what hit us."

"Doomsday wouldn't be so bad," I said, "if we were on a bustling world with tall buildings and the press of people all around us."

"I know what you mean. Out here it's so—desolate. I wonder how they're taking it." He motioned toward the primitives.

"They won't regret a thing," I promised. "They're so sure of salvation they're not even worried."

"Here comes one of them now."

The native trotting across the field toward us was our Pensive One.

He pulled up sharply and I signaled, half facetiously, "Where's the Star Wanderer?"

He smiled as he worked his fingers. "Do not worry. He will come in time."

London was staring trancelike at the ground, uninterested in the primitive.

Pensive One nodded toward the pilot and asked. "The Big One—why did he not save the ship?"

"It was an accident."

"But he should have avoided it."

When I didn't answer, he went on with his sign language. "It makes no difference. He Who Wanders Among the Stars will see to it that the sun destroys none of us."

I drew back and surveyed him warily. It might be possible for them to know something was going to happen to their sun and to guess approximately *when* it

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

would happen. But how could they hit the nail on the head with the knowledge that their "destruction" was involved?

POWDERKEG flared suddenly in a tremendous display of vivid brilliance that lit up the sky with the ferocity of a lightning bolt. I cringed and threw my hands protectively over my head. London only sat there, hunched in a tense, quivering bundle.

Pensive One was in front of me again, his hands flitting in communicative gestures. "The time is not yet."

The words had been spoken with such conviction that I squinted at the fur-wrapped figure. There was *so much* we didn't know about the natives—so much we'd never learn.

For instance: It was understandable that somewhere way back in their evolution Nature had linked their minds together in emphatic union. Since we were not part of that unity, it was impossible for them to tune in on our thinking. Still, how did Pensive One know *London* was piloting the ship when it cracked up?

And he had asked why the pilot hadn't "saved" the craft. It was as though he expected that London could easily have averted the accident.

Nor had that been the first time something like that had happened. After London had sprained his ankle, the native had asked why the pilot hadn't "avoided" the injury—as though some form of control over fate was everyone's prerogative.

And there was the too coincidental manner in which the primitive had come across the plain to meet us—at the exact moment we were seeking him for the language impress treatment.

The whole picture was deeply intriguing and I wondered whether the natives' total lack of suspicion, their unusual degree of self-assurance didn't also fit somewhere into the general outline.

Pensive One was signaling with his hands again.

"What's he say?" London asked with only superficial interest.

"He wants to know: 'Why is the Lean One going to kill himself?' "

"What's he getting at?"

"I don't know."

It wasn't until a moment later that the significance of the native's question suggested itself. I lunged up and stared back at Munrov and the others. The "Lean One" would be Spectrologist Badington, who eminently fit that description. But Badington, who was lying face down on the ground when I had left the group a half hour earlier, hadn't moved.

Puzzled, I turned back to Pensive One and began signaling,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Why do you say the Lean One —"

London seized my shoulder and wheeled me around. "Look, Banks!" He pointed.

Badington and Munrov were grappling on the ground. They rolled over twice and the spectrologist's hand came away from Munrov's holster with the latter's gun.

He broke free from the expedition leader's grip and backed away from the others, holding them off with the weapon. There was an insane desperation on his face as he raised the muzzle to his head and fired.

Munrov went calmly over, took the weapon from the dead man's hand and emptied its charge into the air.

"Good God!" London whispered. "This native *knew* it was going to happen!"

"Of course he did!" I agreed, with a sudden and excited comprehension. "Just like he and the others *knew* the candy was harmless; just like they *know* their sun's going to blow up. And we didn't trick Pensive One into that language impress. He came because he knew we would need him! He came willingly because he also knew we wouldn't hurt him!"

"What are they—*crystal gazers?*"

"Practically. They're *precognizant.* They can see into the future and avoid the pitfalls! It's so natural with them that they take it for granted we have the same talent. Pensive One couldn't understand why you didn't avoid that sprained ankle or why you didn't foresee that tube blowout yesterday."

"I'll be damned!" The pilot shook his head in wonder. "Their telepathic ability in itself would have been a pretty good thing for the rest of the civilized galaxy. But think what this new stuff would have meant!"

Powderkeg was in solar agonies once more. Like an ancient steam engine, it was discharging puffs of hellfire that spread out like expanding halos before breaking up and falling inward again. Each collapse seemed only to touch off a greater, more violent expulsion of blazing gases.

I glanced at my watch. The end would be only minutes away now. But still there was a more important consideration welling in the back of my mind.

"London!" I shouted. "This native may be right when he says we're all going to be saved by the Star Wanderer!"

The pilot frowned incredulously.

I signaled frantically to the primitive, "He Who Wanders Among the Stars—where is he now? What is he doing? Is he on a—ship?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Pensive One gestured affirmatively. "He is on the ship that left here twenty days ago (he meant sixteen in our numbers system). It will be back soon."

"With other ships?" I demanded.

He said, "Yes, with five others."

I grabbed him around the shoulder and danced him across the plain and back again.

"What is it?" London pleaded.

I seized a handful of his hair and twisted his head skyward so he could see what I had just that moment sighted—six interstellar ships plunging through the atmosphere.

"He Who Wanders was a stowaway!" I shouted. "The natives *knew* their sun was going to blow up. They also saw that planting a stowaway aboard the returning auxiliary ship would be a satisfactory solution to their dilemma and to ours too!"

Munrov and the others danced and cheered hoarsely as they watched the fleet descend. The natives, however, were taking it phlegmatically, as though it were all something they had experienced before.

"They were never in doubt about the outcome," I went on, "because they *knew* things would work out all right for the stowaway—that he would get an impress treatment—that he would convince headquarters that if they sent a rescue fleet out immediately it would get here just in time!"

London was grinning too now. "And all the while they were in telepathic contact with Star Wanderer. They *saw* that everything was working out like they knew it would in the first place. But why such a high-sounding name for a common stowaway?" He was shouting to make himself heard above the roar of the landing ships.

"It figures. They're communally telepathic. They converse in pure concepts and images. They probably identify themselves and one another by the overall quality of each individual's thought pattern. They don't need names."

"I get it." London nodded comprehendingly. "When Pensive One had to identify another native for your benefit, he had to invent an appropriate *descriptive* name. After all, didn't *you* have to give *him* a descriptive designation?"

Just then the big blow-up came. But the natives had already filed aboard their respective ships and there was plenty of time for us to reach the waiting auxiliary craft.

As a matter of fact, we slipped into subspace a full two minutes before the nova front reached the planet.

THE END

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

By RICHARD WILSON

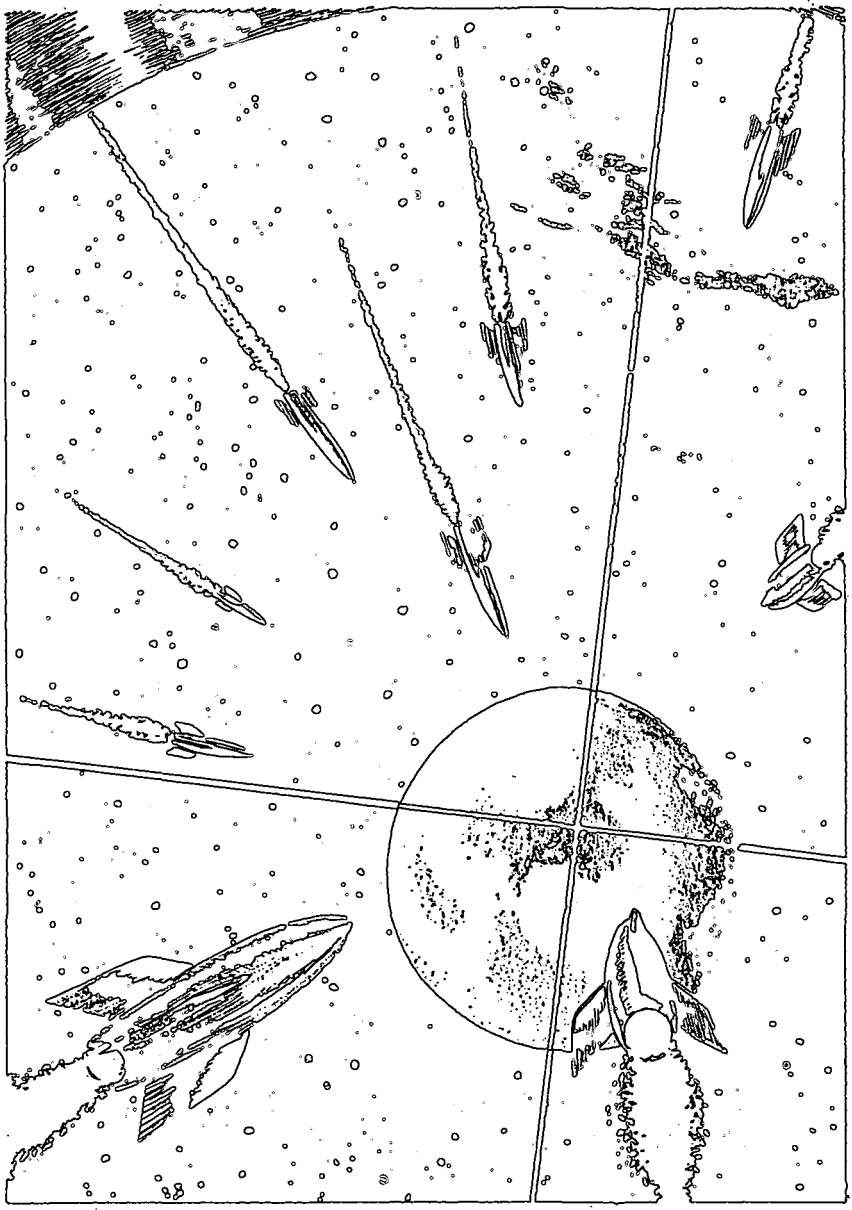
KILLER *in the crib*

Nobody could tell Phillip Lyde that he didn't have the smartest kid in town. And then one day he found out that babies should play with rattles instead of the atom bomb!

IT WAS three days after Joel's first birthday that Philip Lyde first had the feeling that his son was a lot brighter than even a doting father could expect him to be.

They'd had a party for him. Just the three of them. There was a tiny cake with one huge candle stuck into the middle

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Under the touch of baby fingers death poured from the sky.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of it. Catherine had consulted the pediatrician and then baked a cake that even Joel could eat without coming out in spots. They put a paper hat on the baby's head and Philip took flash photos. They tape-recorded the sounds of the party, holding the microphone to Joel's lips occasionally in the hope that he might just choose this historic day to speak his first word.

Philip had four sets of prints made of the photographs — one each for the grandparents, one for the baby book and one to take to the office and show the fellows.

Irwin, the salesman, who had an eighteen-month-old son of his own, examined the prints with reciprocal interest at the office water-cooler.

"How'd you get him to keep his paper hat on?" Irwin asked. "Glue?"

"No trouble," said Philip. "Why?"

"I tried that once. No luck. My Harry snatched it right off, but instantly, and proceeded to eat it."

"Talent. Some have it, that's all."

"Yeah," said Irwin. "Sure. But he is a bright-looking kid, Phil. Took these yourself, didn't you?"

"Yes."

"I can tell by this picture. Your boy has the proper contempt for a damfool amateur photographer — especially a father making a jackass of himself trying to get a good shot of the son and heir. See? If that isn't a sneer on young Joel's face then I've never seen one. It's a dead ringer for the one I get all the time from Soskin, the buyer at Kaufmann's in Pittsburgh."

Irwin was joking, of course, but as Philip Lyde looked at the snapshots again later he couldn't explain away the expression the camera had caught. It wasn't a trick of the lighting, or a bad angle. Of course it was just the way Joel's face happened to be at that fraction of a second, in all innocence, but there was no other word for it. It was a sneer, and it upset him more than he cared too admit.

It was Thursday evening and Catherine was away at her ceramics class. Philip set up the play pen in the living room and popped Joel into it with a cardboard box full of toys to keep him occupied while he fooled with the tape recorder. He was considering editing the tape of the first birthday party and transcribing three minutes of the highlight onto a conventional phonograph record to send to his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

parents in Cleveland. Catherine's parents, who lived just across town, were coming next week and Philip also decided he'd better give the tape a run-through first to see how much of it they could stand.

Joel had tipped the box on its side and taken out his favorite animal, a limp rubber horse that he seemed to like better now than when it had been inflated. He munched on one rubber foot with his seven teeth and sat watching his father.

Philip sped the tape past a symphony and a mystery program they had recorded experimentally from the radio, trying to outguess the commercials, and came to the party segment. He winked at Joel and started it up.

"Say something, Joel," Philip heard his voice saying. "Say Mommy. Mom-my."

Joel had moved his lips encouragingly, Philip recalled, though he hadn't said anything.

But apparently he had. The sensitive microphone had picked up the sound their ears had not.

It was just one word.

A chilling tingle started at Philip's scalp and crawled down his back.

Joel was looking directly into his eyes. The rubber horse dropped. The baby's face showed as much intelligence as any adult's. It showed shocked surprise and a sudden malevolence that matched the word he had uttered on his first birthday.

Philip's hand shook as he set the tape back. Not wanting to, but compelled, he started it again and turned up the volume.

Joel had got to his feet now, and was standing at the railing of the pen, both his baby hands tense on the slats.

"Say something, Joel," Philip's voice boomed. "Say Mommy. *Mom-my.*"

The baby voice came then, alien and horribly distinct.

"Fools!" it said.

Philip had had two stiff shots and was nursing a third when Catherine came back. He was sitting at the kitchen table, his eyes staring out of focus at a red flower in the pattern of the plastic tablecloth. The door to the living room was closed.

Catherine looked at her husband and the glass in his hand and the bottle at his elbow.

She let her purse thud to the tabletop.

"Well!" she said.

The baby, who had been utterly still since Philip snapped off the tape recorder and ran out of the room, began to cry

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

when he heard her voice. The crying became piteous and insistent.

"Look at you!" Catherine said. "How long has this been going on?"

She went into the living room and came back with Joel in her arms. He stopped crying.

"The poor child is soaked," she said. "Philip! What kind of father are you? Look at him!"

Philip forced himself to look. Catherine's eyes were blazing at him contemptuously. Joel, his head nestling against her shoulder so she couldn't see his face, was looking at him too. The expression on his infant face was a cool, confident smirk.

Philip tore his eyes away and tossed down the liquor. He got up, knocking over the chair. Without picking it up he half ran to the hall closet and got his coat.

He ran out of the house.

"Philip!" his wife yelled after him.

He turned once, at the street, and looked back. The two of them were at the window, the baby's head close to Catherine's, looking after him.

He ran until the house was out of sight.

It was a bar loud with talk and a juke box. The noise soothed him, but not enough. He must have looked wild, because the bartender hesitated before serving him a double shot and asked, "You all right, Mac?"

"Argument with the wife," he improvised. The bartender nodded and said nothing more. He poured the glass to the brim and left the bottle.

God! Philip forced himself to drink slowly. He took a sip and lit a cigaret shakily. He tried to concentrate on the words accompanying the guitar-thwanging, piano-thumping popular song blasting out of the gaudy Wurlitzer. They only reminded him of how he had sent up the volume of his own machine and heard that improbable word.

He tried to blank that out of his mind and concentrated on reading the fine print on the label of a brandy bottle at the back of the bar. It reminded him of the bottle on his own kitchen table, and the boy-creature in the next room, silent as death, likely staring with God knows what expression at the closed door between them. With God knows what thoughts inside that baby skull, under that curly blond hair.

Philip took another sip. It burned good as it went down

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but it didn't help him forget.

He realized he was sweating. He took out a handkerchief and wiped his forehead, his upper lip and the back of his neck. He felt cold and suddenly he was shivering all over. He forced himself to stop and down the rest of the whiskey.

The bartender was a good one, one of the psychic kind, apparently. He had been busy at the other end of the bar, but then he was opposite Philip, pouring another drink, again to the brim.

"Don't brood about it, Mac," he said. "It'll work itself out. Always does."

"Sure," said Philip, grateful to him. "Thanks."

"Everybody and their brother's here tonight, or I'd stick around, if it'd help any. Feel free to pour your own if I'm busy."

"Thanks," he said again. I'll be all right."

The two men on his right were talking baseball and the man and girl on his left, obviously theater people, were comparing Alfred and Lynn with Rex and Lilli. After a while, by concentrating his eyes on the brandy bottle label and his ears on the simultaneous conversations, he began to feel more normal. Finally, midway through his third drink—his sixth, counting the three at home—he stopped feeling scared.

He didn't discount what he'd heard on the tape or what he'd seen in Joel's face, but now he could think about them rationally, as if these things had happened to somebody else. He pretended they had happened to his friend Roy and tried to imagine what he would say to his friend Roy.

Roy, he would say, first let me say that I believe you. I postulate that this actually happened, that you weren't mistaken. Now, then—

But he couldn't think of any Now, then.

Except Catherine. He had hated both of them, irrationally, when he rushed out of the house. Now he no longer hated, or feared, but he did feel concern for his wife, alone in the house, with—it.

He got up, leaving some change on the bar, and smiled and nodded to the bartender to show him he was all right now, and went home.

A small light had been left for him. He listened at the doors of the nursery and the bedroom. Both the baby and Catherine were asleep. There was no note. He left one for his wife, saying he was sorry and that he'd explain in the morning, then brushed his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

teeth vigorously and went to bed.

He was hard to arouse in the morning. When he did wake up there was time only to race through a shave and drink a cup of coffee before he dashed for his bus.

He wondered if he was subconsciously trying to avoid telling Catherine about Joel.

But that evening, as he called Catherine from the office to say he'd have to work a bit later and not to wait supper for him, he admitted to himself that he was trying to avoid Joel.

He did have some work to do, though it could have waited, and he finished it while he ate a sent-out-for sandwich. Then he dawdled, cleaning up his desk and looking out the window at the deserted business street.

He reached home after the baby had been put to bed.

Catherine didn't holler at him, as he felt he deserved.

"I made drinks," she said. "No offense intended, but would you like a hair of the dog?"

"I would," he said. "Mastiff sized. You'd better have a stiff one yourself. I've got something to show you."

"Oh?"

He went to the tape recorder. "Better take a good swallow of that first," he said. "This may be a shock."

She looked puzzled but said nothing. She obediently took a long drink from her glass.

"This is why I got drunk last night," he said, and started the machine. "Listen."

His voice came from the tape:

"Say something, Joel. Say Mommy. Mom-my."

Philip braced himself.

But there was only silence where there should have been that single unearthly word.

Then Catherine's voice came from the tape:

"Say Daddy, Joel. Dad-dy."

Philip switched off the machine. He looked at his wife with amazement. "He didn't say anything!"

"That's nothing to get drunk about," she said. "You can't expect him to perform on cue. He'll talk in good time."

"I'm not talking about that." He set the tape back and ran it again. But again there was a silence, even when he turned the volume up, where there should have been that other voice.

"I couldn't have been mistaken," he muttered. "I *heard* it."

"What?"

"Has anyone been fooling with this machine?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Of course not. You're the only one who ever touches it. You made the rule yourself."

"Was Joel in here today?" The question blurted out.

"Yes, he was. I set up his play pen here and put him in it while I did some washing down the basement. But I doubt very much that he climbed over the railing and recited Hamlet's soliloquy into your precious machine."

"So he *was* in here." Philip stared at the machine in horror. "It's worse than I thought."

"What, for heaven's sake?" she asked exasperated.

"Somebody," he said slowly, "has wiped the tape. In just one spot, deleting just one word. Expertly."

Joel first communicated with Philip late the next morning, while Catherine was out doing her Saturday shopping.

Catherine had gone on her way unperturbed by Philip's oddness, which she was satisfied was the result of a drunken fantasy.

She reminded him of the time he'd got high as the Matterhorn on Gibsons and explained to her quite seriously about the green lion-head marmosets that lived under the studio couch in the living room. He'd pleaded with her to be careful when she vacuumed under there, because they were very tiny and might easily be sucked into the dust bag. She didn't see them, he realized, because she had green eyes and they filtered out the image of the marmosets.

Philip protested that he'd been making that up, about the marmosets, to amuse her, and she knew it, but she laughed and went off to the supermarket with her wheeled grocery basket.

Joel acted like a normal year-old baby for perhaps three-quarters of an hour. He made a mess in his diaper like any infant and Philip changed him, even forgetting himself so far as to go "bra-a-ack" with his lips against Joel's belly-button. The baby laughed uproariously, and quite normally.

Joel had his lunch in his high chair, fussing a bit over the chopped meat that Philip was spooning into him, but greedily putting away the mashed carrots and puree of apricots. Joel submitted to the face-washing ritual afterwards with fewer protests than usual and allowed his bib to be removed. Philip put the bib in the hamper and hung up the washcloth.

Then he sat down again

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

opposite his son and said, only half-jokingly:

"You're not as dumb as you look, boy."

The baby expression on Joel's face vanished, as if on cue. It was replaced by an adult, intelligent look.

"I'm not dumb at all," Joel said. He spoke with the barest trace of a baby lisp. "The voice reproducer told you that."

Philip started to tremble. He forced himself to stop by gripping the sides of his chair. He tried to force himself to think rationally, but had less success.

His thoughts went back to Catherine's pregnancy, when they were picking out boys' and girls' names. They'd decided it would be Tracy if a girl, and Catherine was holding out for Joel for a boy. Philip objected on the grounds that Joel Lyde would be ambiguous. People hearing his name would think it was Joe Elide. Catherine refused to listen and when a boy was born he was recorded as Joel Lyde.

And now he's Joe Elide, Philip thought crazily. He's elided the years between infancy and adulthood. Skipped from *goos* and *urghs* to mature speech.

"Joe Elide," Philip said vaguely, dropping his gaze from the eyes of this person who had once been his infant son. "Wonder boy." He stared at the feet, which were still baby feet.

"Joel Lyde," the other said. "The name you gave me. You're confused, aren't you?"

"That's putting it mildly," Philip said to the feet. "I'm scared to death."

"You should not fear me. I'm your son still. But I'm also your son plus. There are really two of us."

"Two of you," Philip said dully, not looking up.

"You're trying to understand, aren't you? I'm glad of that. You do have a modicum of intelligence."

"Thanks," said Philip bitterly, in a reflex.

"Good. I had hoped the insult would sting you out of your torpor."

"Who the hell *are* you?" asked Philip, still coasting on the reflex. He looked at the child now, almost angrily.

"Another kind of human being, from another place. A scout, you might say. I've come to look you over."

"See anything?" asked Philip, stung again. Then he felt tricked, as if he were the child using childhood retorts to this other, so much more the grown-up.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I see a good man," the other said, perhaps flatteringly, "trying manfully to understand what he cannot possibly understand without further explanation. I have been rude. I apologize. I am indebted to you for having taken me in."

"*I'm* the one who's been taken in," Philip said. He felt almost superior again, having turned a phrase.

"An idiom, I suppose." The head nodded and the expression on the infant face was so sage that Philip smiled. "Good. We approach each other more closely. That is part of my mission."

"So now you have a mission. Fifty-three weeks old and already you have a mission." Philip got up suddenly and stood looking down at the person in the high chair. "You'll forgive me if I babble, but I feel drunker now than the other night when I really was."

"I forgive you," the other said, "because I know your limitations. You're only human—"

"And you?" Philip interrupted. "What are you?"

"I'll tell you," Joel's voice said.

There was a speck of land in a great sea on a tiny planet circling a double sun. Once the land had been more and the sea less, and the people had prospered. But now the waters lapped at the edges of the planet's tallest mountain and the end of their world was in sight. Subterranean explosions occurred now and again and after each the land settled a little deeper into the water. The survivors moved higher on the slopes, or tried to find room on the great central plateau, already overcrowded.

Everyone knew how it would end. Members of the Science Guild put aside their minor differences and agreed broadly on the alternatives. There weren't many. It was impossible to reverse evolution and become a water-dwelling race—not in the few years that remained to them before the mountaintop was inundated. Nor was it possible to build a sunken world. Several attempts had been made but each time the explosion that shrank the land also sent the subterranean tunnels and caverns crashing in, or flooded them.

Two things remained possible for the people of the mountain. They were escape by air or escape by sea.

Each course had it faults and its perils. Those who fled

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

by sea would be fleeing to nowhere. Perhaps generations would be born and die before the ocean receded again or another mountain thrust its head above the waves. They would have to subsist on the rain they could gather, the food they could grow and the fish they could catch. The ships would have to be immense to provide room for these vital activities. And they could build only a dozen or so in the time left to them, and not everyone could be accommodated.

Escape by air was a bigger gamble. They would be going beyond the air, in search of another planet that could support them. They'd sent out spaceships before. Many had been lost. The few that came back reported no possibility of life on any of the four other worlds circling their double sun. But they had since built better ships, which could range beyond their solar system, to explore the worlds of other stars.

"I am from one of the spaceships," the adult-baby voice of Joel said. "It has been a long journey. My grandparents were among the original passengers, all of them dead now. My parents and their generation also died en route. But the third generation lives. And we have found our world."

Philip had been sitting slumped in his chair, listening without apparent emotion. Now he said mildly, as if he were merely stating the literal truth:

"I thought it was *our* world."

"You shall share it with us. There are not many of us."

"Decent of you."

"You've expressed no curiosity about how I came to be in your son's body," the other said, as if he resented the apathy with which Philip had heard about his people's epic journey. "Shall I tell you about that?"

"If you like."

"I'll make it as simple as I can, to put no strain on your intelligence."

"Thanks," Philip said.

They "anchored" their spaceships in an orbit near the Moon. Their instruments indicated that the mother world of the satellite would be suitable for habitation. But the instruments also revealed that the world was inhabited already and that the inhabitants had a technology advanced enough to be dangerous, especially when coupled with the low boiling-point of their culture. In oth-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

er words, the inhabitants might shoot first at a scout ship hurtling down from the Moon, and then try to put the pieces together to learn what had been inside it.

There were too few of them to risk any such disaster, so physical exploration of the new world was deferred. There would have to be, first, a psychic invasion.

(The word *invasion* was a slip, Philip thought. He maintained his indolent posture, but something was ticking over in his mind now. He did not know what it was, yet, but he encouraged it to keep ticking.)

The travelers from the far-off mountaintop world had perfected new skills during the long years of their journey through the void. They developed a means of traveling mentally, from mind to mind, among themselves.

It wasn't easy. It required the utmost concentration. Even then, blocks were sometimes encountered, or a kind of mental static, which could prevent a transfer that previously had taken place with ease.

"And so we traveled to your world, from our anchorage at the satellite, by mental means," said Joel's voice. The baby body sat in the high chair, its face adult and its fat infant arms gesticulating. "We found suitable bodies and we entered them. We're here—in the bodies—merely as observers, seeing your world through native eyes, helping decide when and how the spaceships should come down, and where our people, in their own bodies, would find it best to settle."

(He's lying now, Philip thought. He wouldn't be telling me all this if he weren't lying for a purpose. He needs me for something. Something he and his mind travelers can't do for themselves.)

"And then?" Philip said aloud.

"Then we scouts leave the bodies where we've been guests, with thanks for the hospitality. We'll become merely another of the thousands of races upon your planet, bothering no one, not displacing any of you. We're very like you—a little shorter, a little fatter, perhaps. Our needs are simple and our technology is advanced. We could settle somewhere in the vastness of Africa or the central desert of Australia—land useless to you—and develop it to serve us. By thus redeeming waste land, we would also be of real service to you."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I see," Philip said noncommittally.

He was considering asking if all the mind travelers had lodged themselves in the bodies of infants when his wife opened the front door and the conversation came to an end.

"How's the marmoset situation?" Catherine called to him as she wheeled her market basket into the kitchen.

Joel had snapped back to babyhood. He gave his mother an infant smile and the clumsy, wrist-swiveling wave he'd learned.

Philip looked at him closely, but was unable to tell anything.

"Nobody here but us extraterrestrials," Philip muttered.

Philip was awake, staring at the dim whiteness of the bedroom ceiling long after his wife had fallen asleep.

"Daddy!"

It was his son calling. He knew that instantly as he sat up and swung his feet to the floor. It was his son, speaking for himself—not the alien speaking through him. He didn't know why or how. He just knew.

He ran to the nursery. Joel was standing in his crib in the dark. Philip snapped on the light and saw his frightened eyes.

He lifted the baby out of the crib and sat down with him in his lap.

"What is it, son? What's the matter?"

"I'm scared, Daddy. I'm grown up all of a sudden, I guess. Is it being grown up when there's somebody in with you and you learn to talk?"

Philip felt cold and frightened again. But he struggled now to accept the abnormal as the normal, knowing only that this was his son talking and not the other.

"People grow up in different ways, Joel," he said. He held the boy close to his chest and stroked his soft hair. "Don't be afraid. Is—is he in with you now?"

"No. He went away. He had something to do. He's coming back but he went away and I called you when he did. I learned to talk after he was in with me but he didn't know it, I don't think. I learned all of a sudden. I don't like him, Daddy."

"I don't like him either, Joel. We'll have to figure out what to do. When he's in with you, what happens? Does he make you do what he wants?"

"No. He sort of—displaces me. I feel everything just like

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

before, but I'm also outside someplace, watching. Like when he climbed out of the play pen and did that to the tape recorder. I felt myself climbing out, even though I knew I couldn't by myself, but at the same time I was up in the middle of the room, like, watching him do it. It's scarey."

"Where did he go? Do you know?"

"Back to the ship. To report. They all had to go back at the same time."

"You know about the others?"

"Yes. I know everything he knows. He su-per-im-posed —that's a hard one—his mind on mine and when he went away it left a pattern. He told you a lot of lies, Daddy, like the one about the way his people look. Not like us. They're big, and stick out all over, and they're hard and shiny, like glass."

"What about the others—the other mind travelers? Were they all in with babies of your age, or were some of them in with grown-ups?"

"All babies. They couldn't get in with grown-ups. They could only superimpose on minds whose thought patterns hadn't formed. A year old was the best age because they were old enough to do things if they were directed, but not so old that there was any rejection of an alien. I know about some of the babies they were in with."

"Who?"

"The son of the Assistant Under Secretary of State. The son of Dr. Nils Bolstadt of the University of Chicago. The daughter of the secretary to the president of General Electric. The grandson of the Chairman of the Joint Chiefs of Staff . . . I feel so funny, Daddy, knowing all these things and not knowing what they mean."

Philip held the boy close to him. He felt like a monster, grilling this infant who'd had an alien mind printed on his. But he had to do it. He had to learn all he could, while he could, dispassionately, before the alien returned. For his son's sake, for the sake of all of them, he had to forget for now that Joel was physically an infant and instead to pump his supercharged brain for all the information it held.

"You're being wonderful, Joel," he said. "Now, why did he get in with you? All those other children are close to big important people, but I'm only a clerk in a business office. What do they want with me?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"You're the Average Man. They talked tel-e-path-i-cal-ly about you. The one who was in with me was trying to find out how you thought about their coming, and things like that. That's why he talked to you through me. The others didn't. They just spied. They thought you were very un-co-op-er-a-tive. They wished they could read your mind, but they can't get in with grown-ups."

"Thank God for that. We may beat them yet because of it, if we can keep you safe—and the other children."

"Are they bad, Daddy?"

"Yes, Joel. They're bad for us."

"I thought they were when he lied to you. He wasn't telling the truth, either, when he said they were going to live in Africa or Australia. They can't live on this planet in their own bodies. The atmosphere is wrong. So they're not just using our bodies to scout with. They're coming back to live in them, and all the others are coming, too, from the ships. And they're going to use the old bodies like mine and a whole bunch of new ones. And they're going to wait for us to grow up, they said, and then they'll take over . . .

"Daddy, I don't *want* him to come back in with me! Daddy, I'm scared!"

The child was shivering in his arms. The tiny arms clung to him. Joel began to cry, not like an infant, but like a man who has seen and felt too much and has to let go in gulping, smothered sobs.

Philip comforted him as best he could. But he had to ask one more question.

"Joel, boy," he whispered. "How many of them are there in the ships? Sixty? A hundred?"

The child blurted out the answer between sobs.

"Three million," he said.

Joel, exhausted, had fallen asleep and Philip tiptoed out of the room. He looked into the bedroom. It seemed inconceivable that Catherine could still be asleep, that he had left her just a few minutes ago. But she slept peacefully.

He closed the bedroom door again and went to the telephone. He dialed long distance. An operator came on after several rings.

"I want to make a person-to-person call to Admiral Randall Clarendon, in Washington, D. C. I don't know his number."

"Thank you." There was a long wait, then the operator

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

said, "I'm sorry, sir; we have no listing for any Admiral Randall Clarendon."

"But you must have. He's Chairman of the Joint Chiefs of Staff."

"I see. Then his home number is probably unlisted. I can connect you with the Department of Defense."

"No, thanks."

He looked at the clock. A little after 1 a.m. A little after 2, Washington time. He'd get some sleepy duty officer at the Pentagon who'd never listen to a wild story about the JCS Chairman's grandson being infiltrated by an extraterrestrial.

He picked up the phone again and asked for Dr. Nils Bolstadt in Chicago. Bolstadt was the atomic scientist. Philip might have more success with a man who worked every day with the seemingly improbable.

But Dr. Bolstadt, when he came to the phone, was barely civil. He listened briefly as Philip began his explanation, then interrupted. He said Philip might not be a drunk or a crackpot but the chances were that he was. He had an average of two calls a week from members of the Anti-Atom Bomb Society, or from people with plans for hooking up baby atomic reactors to the house current, and if he listened to all of them he'd never have time to do any work.

"Just do one thing," Philip pleased. "This will prove what I'm trying to say. Talk to your son. Just talk to him and listen when he answers."

"I have two sons," Dr. Bolstadt said, "and—"

"The one who's just a year old. You must believe—"

"My sons are asleep, as I should be. I'm going to hang up now and if you ring again I promise you I'll have the call traced and report you to the police. Good-bye."

The connection was cut and Philip hung up in despair. He sat with his head in his hands.

"Daddy."

He went into the nursery. Joel was sitting up in his crib.

"Are you all right, son?" He had a moment of nausea when he thought that the alien might have taken over his son's mind again.

"Yes, Daddy. I woke up when I heard you telephoning. They don't believe you, I guess."

"No. I was crazy to think that they would. But I had to do something."

"Maybe I can help. I can talk to Georgie."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Georgie?"

"Georgie Clarendon. His grandfather is that man in Washington, the Admiral. I could talk to Georgie tel-e-path-i-cal-ly, I think, and he could talk to his grandpa. The one who was in with me talked to the one who was in with Georgie and now that they're gone I think I could talk to Georgie without them."

"By all means, boy. Try!"

Joel stood inside his crib and set his face in a scowl of concentration. The minutes ticked by. Then Philip saw his son's lips move, as if he had made contact and was communicating.

"I woke Georgie up," said Joel with a little smile, "and first he thought it was a dream. Then when I explained to him, he didn't know he could talk. So he practiced a while and then went to wake up his grandpa." Joel sat down in his crib. "It sure made me tired."

"Do you feel all right otherwise, Joel?" His father looked at him anxiously. "You don't sense him—the alien—coming back yet, do you?"

"No," Joel said, then motioned his father to be quiet. "But Georgie's back." He sat in a listening attitude. "His grandpa is very surprised and he doesn't know whether he believes him."

"He's got to!" said Philip. "Tell Georgie to tell him about Dr. Bolstadt's son, if he needs confirmation. It'll take time, but we've got to convince him."

Joel nodded and concentrated again. Finally he said:

"The Admiral has a message for you. He says to tell you he's a professional skep . . . skep-tic, but he'd already had secret reports about something funny going on near the Moon's surface and he's checking back on them right away."

"Thank God," said Philip. He looked out the window at the Moon. It was in its last quarter and there was a star twinkling near the back of its crescent. The star belonged there. But there were things up there that didn't belong. Maybe radar had already picked them up. He hoped there was a tangible trace of the aliens—something more than just a series of conversations with an infant who sometimes spoke like a man and sometimes like a creature from an alien and hostile race.

Philip went to peer into the bedroom to see if Catherine was still asleep. She was. He

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

picked up a pack of cigarets and an ashtray on his way back to the nursery.

"What's happening now, Joel?"

"The Admiral's telephoning. He's made a dozen calls, I guess. Daddy?"

"Yes, son?"

"This is going to sound incon-gru-ous, but—could you change my pants? They're wet."

Philip laughed. He laughed a little louder than he should have, in that quiet threatened house, but he needed the partial release from the tension he'd been under for days.

"Of course, Joel." He picked up the infant and put him on his back on the top of the bathinette. "You don't know what pleasure it will give me to change your wet pants."

"Well, I can't help it," Joel said defensively. "Besides, they're a distraction."

"You're doing a man's work, son," Philip chuckled, "and the least you ought to have is a clean diaper."

Later, when he'd been pinned up again, Joel reported:

"Message from the Admiral. He says it's the damnedest campaign he's ever run. It may also be the most important war this country's ever fought, though only a handful of people will ever know about it. He's swearing you to secrecy."

"War?" said Philip.

"Yes. An aircraft carrier and an air force base are at battle stations. But he insists that you swear."

"I swear," said Philip. "Of course."

"They've sent up Lark V and Regulus missiles and a super-Nike from the base. Atomic warheads on all of them. Look at the Moon."

Philip took his son in his arms and sat with him at the window. Low in the sky, thin and cold the Moon rode, next to its companion, the star.

They watched. And waited.

Joel screamed. The infant body gave a convulsive jerk.

"Daddy!" the baby cried in terror. "He's back. He's trying to get in with me again! Don't let him, Daddy!"

Philip held the boy tight against him.

"Fight him, son," he whispered fiercely. "If you can just hold out . . ."

His eyes strained into the night as he willed the missiles up, up, faster, faster . . .

The baby voice gurgled to silence. When it spoke again it was no longer his son's.

"You fool," it said scornfully. "Did you think—"

At that instant there was a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pinprick of light against the dark area between the horns of the crescent Moon. Then another, and a third, and a dozen others.

The alien voice stopped, cut off.

"Daddy," Joe said weakly. "My boy . . . my boy."

Philip hugged the soft, shivering body to him.

"Message from the Admiral," Joel said faintly. "He says . . . it's the first war he ever fought in his pajamas."

Seconds later he was asleep.

Philip put him tenderly into his crib, on his stomach. Joel automatically drew his knees up under him.

Philip drew the soft blue blanket up to his son's neck. He patted the little rump, looking out at the serene Moon.

Catherine found her husband in the nursery in the morning. He had pulled an armchair into the room and was asleep in it, an ashtray full of cigaret butts on the chest of drawers at his elbow.

Philip woke with a start.

"What's the matter?" Catherine asked. She went to the crib. Joel was still asleep.

"Did he wake up during the night?"

"Little while ago," Philip said inaccurately. "He had a bad dream, I guess. He's all right now."

"You should have called me," she said. "Poor little fellow. I wonder what goes on in his little head."

"I wonder."

Catherine went to the kitchen and began to fix breakfast.

Joel opened his eyes. Philip went to him.

The child clambered to his feet and his father picked him up.

"Daddy," Joel said. "I . . . remember, but it's getting dim. It's all . . . going . . . away . . ."

"I'm glad, son. I'm very glad."

"Daddy, I . . . Daddy. Daddy. Da-da."

"Catherine," Philip called.

She came in.

"I think he said his first word," Philip said. "Say Daddy, Joel. Show Mommy. Say Dad-dy."

"Da," said Joel, concentrating hard. Then, triumphantly, pounding his father's shoulder with a tiny fist, "Da-da. Da-da!"

THE END

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE UNUSED STARS

By
ISAAC ASIMOV

Bored with Deneb and Alpha Centauri? Fed up with Procyon? The sky is loaded with perfectly good stars . . . how come they're not popular?

A STOCK in trade of the science-fiction writer is (or should be) the names of the various stars. Out there is where the plot action is proceeding much of the time. Yet it strikes me that the clan is not using its opportunities properly.

Of course, every visible star and thousands of invisible stars have names. Many involve Greek letters and the names of the constellation they're in. Alpha Centauri, for instance, simply means "first of the Centaur." There are also Beta Centauri, Gamma Centauri and so on. And when Greek letters run out, astronomers use numbers. Or else they call a star as such-and-such a number in so-and-so's catalog of stars.

However, there are about 250 stars with names all their own; nice mouth-filling names. Of these, perhaps a dozen are met with in s.f., and thereafter writers start making up names. This seems a waste, since the star-names that remain unused and unsung are in many cases real beauties. Who would invent a name like Ruchbah, for instance, or Benetnasch. Yet those are real names of real stars.

Even the old reliables, the few star-names that are used so often in s.f. as to become cliches (Sirius springs to mind—one of my own overused ones) gain new vitality, however, if we consider what the names mean.

Sirius is in the constellation Canis Major ("Great Dog"—the official names of all the constellations are in Latin) and is sometimes called the "Dog Star" for that reason. Because it is so bright a star, the ancients had the sneaking suspicion that it added significantly to the sun's heat, when it rose with the sun

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in midsummer. We still call midsummer, the "dog days," and the name Sirius itself bears this out, since it comes from a Greek word meaning "scorching."

(Incidentally, Sirius being the Dog-Star, its white-dwarf companion has been referred to as "The Pup.")

A bright star to the west of Sirius is in Canis Minor ("Little Dog.") Since it is to the west of Sirius it naturally rises and sets a little earlier than Sirius. This star rising before the Dog Star does is called Procyon, from Greek words meaning "before the dog."

Near the two constellations Ursa Major ("Great Bear") and Ursa Minor ("Little Bear") is the constellation Bootes ("Herdsman"). The ancients pictured the constellation as a man holding two dogs in leash. The dogs were represented by stars in a small constellation between Bootes and Ursa Major, these being Canes Venatici ("Hunting Dogs"). Bootes and the dogs were obviously protecting the rest of the heavens against the ferocious bears. Consequently, the brightest star in Bootes was named Arcturus, from Greek words meaning "guardian of the bears."

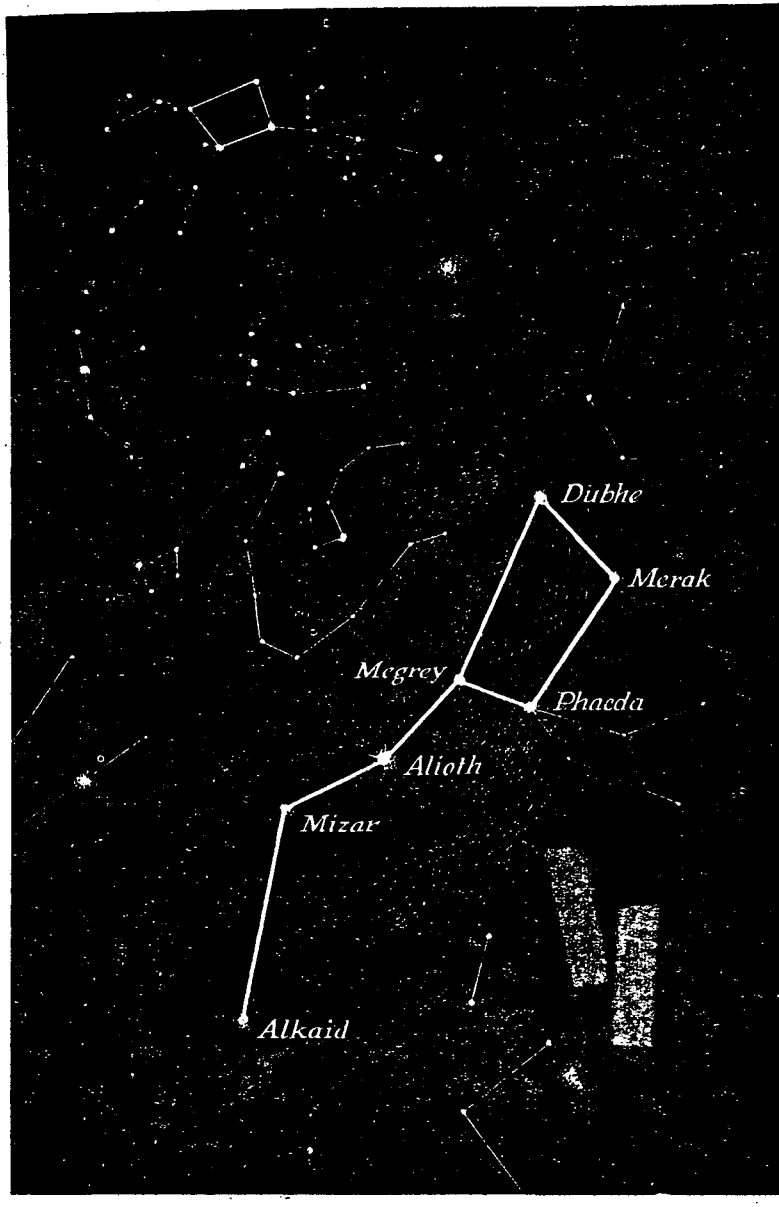
The ancients took the imaginative pictures they drew seriously. For instance the constellation Auriga ("Charioteer") was drawn by them as an old man, holding a bridle in one hand and a goat and her kids in the other. The stars at the side of the constellation are therefore referred to as The Kids, and the brightest of these (and of the whole constellation) is Capella, from a Latin word meaning "little goat." Capella is often called the Goat Star for this reason.

Again, the constellation Virgo ("Maiden") is pictured as a young woman holding ears of grain in her hand. Presumably, this is because the sun enters Virgo in the early fall when the grain is ripe and ready for harvest. The star in those ears of grain is Spica, the Latin word for "ear of grain."

Sometimes the names are less dependent on the constellation pictures. The constellation of Gemini ("Twins") contains two bright stars closely spaced in the heavens (which probably inspired the name of the constellation). The Romans called them after the most famous twins in their mythology, Castor and Pollux.

Regulus is the brightest star in Leo ("Lion") and comes from the Latin word meaning "little king," which is appropriate for the chief ornament of the king of beasts. More appropriate still is Antares, which means "opposed to [or rivalling] Ares," Ares being the Greek God whom the Romans called Mars. Antares is a red star, rivalling Mars in color. Most appropriately named of all is Polaris, the star marking the North Celestial Pole, which is also called the North Star and the Pole Star.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Some of the unused stars.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then there are completely inappropriate names. The constellation Orion ("Hunter") is pictured as a giant who is holding up his left hand to ward off the onrushing Taurus ("Bull") while he is ready to strike with the club in his right hand. Bellatrix is the star in his left shoulder and its name is the Latin word for "female warrior," something I imagine Orion would resent.

However, the large majority of the star-names are neither Greek nor Latin but are Arabic. (Hence the number of stars with names beginning with "Al—," the Arabic word for "the.")

For instance, have you ever seen the seven stars of the Big Dipper? Sure, you have. All right, then, what are their names? Of course, most of us have learned to call the two stars that form a line aimed at Polaris, "the pointers," but can you do better than that?

Well, here are the names, starting at the end of the handle of the Dipper and ending with the pointers: Alkaid, Mizar, Alioth, Megrez, Phecda, Merak, and Dubhe. How's that for a resounding series of syllables?

The first star in the list is a word meaning "the leader," for reasons that are obvious.

The second star, Mizar, means "veil." Behind that, lies a story. Near Mizar is a considerably fainter star. If this second star were by itself it could be seen without trouble, but the presence of the nearby brighter star veils it, you see. In order to distinguish the weaker star, you must have good eyesight, and for centuries this star-pair was an eye-chart in the sky and was used as a test to distinguish good sight from bad. The fainter star is Alcor, from a phrase meaning "the weak one."

The name of the third star in the Big Dipper, Alioth, is an Arabic word for the fat tail of a sheep. If that sounds startling, you'll have to realize that the Greeks pictured the Great Bear in such a way that the four stars forming the bowl of the dipper formed his rear half, while the three stars of the handle of the dipper formed a tail. Now you and I know that bears have no tails to speak of, but the Greeks either didn't know or didn't care. The Arabs must have been bothered, though. The pictured constellation looked like a bear with the tail of a sheep to them.

The fourth star, which begins the bowl of the dipper, is Megrez, meaning "root," presumably because it is the root of the tail.

I have not found out the meaning of Phecda, but as for the pointers, Merak (the further from Polaris) means "loin" since it is located in the loin of the bear, while Dubhe just means "bear."

Similarly, the four stars of the famous "square of Pegasus" (Pegasus is the "Flying Horse") are Alpheratz, Algenib, Markab and Scheat. Alpheratz, in the flank of the horse, means "the mare"; Algenib, higher up, is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"the side"; Markab, still higher up, is "the saddle." Scheat, just above a foreleg, is not as clearly named. It may be derived from the word for "good fortune" but I can't think why.

A number of the more familiar star-names are also of Arabic origin. The second brightest star in Orion, the one in the left leg of the pictured hunter, is Rigel, from the Arabic word for "foot." Betelgeuse, the brightest star in the constellation, is in the uplifted right arm of the hunter and is a corruption of an Arabic phrase that originally stood for "arm of Orion."

Other stars are as literally derived from the picture of the constellation. Altair, the brightest star in the constellation Aquila ("Eagle"), means "bird." The constellation Pisces ("Fishes") is pictured as two fish held together by a long cord. In the middle of the cord is the brightest star of the constellation, Al Rischa, meaning "the cord."

The brightest star in the constellation Cygnus ("Swan") is Deneb. It is located in the rear portion of the swan as usually pictured, and comes from an Arabic word meaning "tail." This was a favorite star-name among the Arabs, so that there are a number of Denebs in the sky. The Arabs distinguished among them by adding a second word for the constellation. This persists in some cases. For instance, Deneb Algedi in Capricornus ("Goat") means "tail of the goat," and Deneb Kaitos in Cetus ("Whale") means "tail of the whale." The second brightest star in Leo is Denebola, the "-ola" suffix being what is left of that portion of the Arab phrase meaning "of the lion."

On the other hand, just to show that the Arabs are not restricted to one end of the creature, the brightest star in Piscis Australis ("Southern Fish") is Fomalhaut, from an Arabic phrase meaning "mouth of the fish." Similarly, the brightest star of Ophiuchus ("Serpent-Holder"), pictured, naturally, as a man holding a serpent, is Rasalhague, meaning "head of the snake-charmer."

Aldebaran, the brightest star in Taurus, is a kind of Procyon in reverse. Aldebaran is a little to the east of the Pleides and consequently follows them both in rising and in setting. The name of the star means "the follower" in Arabic.

Perhaps the most colorful Arabic name for a star is that for the second brightest star in the constellation Perseus. It is one of the few stars in the sky that changes brightness visibly and regularly. This was a startling thing to the ancients, who generally believed that the heavens were perfect and unchangeable. The only solution the Arabs could think of was that this particular star was under the control of a malevolent spirit, and they called it Algol, which means, literally, "the ghoul," though it

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is usually translated as "the demon." Algol is consequently known as the "Demon Star."

All this just gives you an idea. Among the two hundred or so names not mentioned are such succulent samples as: Tarazed, Pherkad, Mesartim, Kochab, Izar, Caph, Dschubba and Azelfafage.

So why make up names, gentlemen?

THE END

(Continued from page 23)

see my feet, they're so far off and gone away below.

He moved the lawn mower. The grass showering up fell softly around him; he relished and savored it and felt that he was all mankind bathing at last in the fresh waters of the fountain of youth.

Thus bathed, he remembered the song again about the wheels and the faith and the grace of God being way up there in the middle of the sky where that single star, among a million motionless stars, dared to move and keep on moving.

Then he finished cutting the grass.

THE END

ICY COLD-WAR

by JUNE LURIE

EVEN THOUGH this is an air-age, devoted to jets and rockets, still the bulk of the world's heavy commerce goes over the cold North Atlantic sea-lanes. Huge passenger ships and freighters plow the great-circle routes over the North Atlantic, taking advantage of the shorter distance as compared with straight East-West sailing.

But the North Atlantic is a treacherous dangerous stretch of sea, abounding as it does in icebergs, which seem to be increasing in size and numbers in recent years. Against these mountainous hulks of solid ice, science has brought every weapon in its lavish arsenal; the weapons so far that work are simple and can be summarized in one word—watchfulness!

Patrolling the grim lonely northern ocean are the ships of a dozen nations, their radios humming out continual warnings of the location of the subtle monsters, the icebergs. These vast structures of ice, seven-eight submerged, disdainfully regard the efforts of man, and ponderously go their majestic ways, unharmed by any attacks man can make against them.

The combination of these floating icy mountains, hidden in fog, and drifting rapidly with the Atlantic currents, can cause terrible loss of property and life. Ever since the terrible *Titanic* disaster ways have been sought to track the floating skyscrapers. At present there are only two really effective tools in the scientific arsenal—radio and radar. The former continually reports the location of known bergs—the latter finds them. In addition, ships equipped with radar can stay clear of the knife-edged bergs.

At present a lot of people would pay a lot of money if there was found some simple way to destroy the gigantic icebergs when they drift into the sea-lanes from the northern latitudes. So far the most powerful explosives are useless against millions of tons of submerged ice. Possibly the atomic bomb might be used with some success, but there is ever present the deadliness of radioactivity.

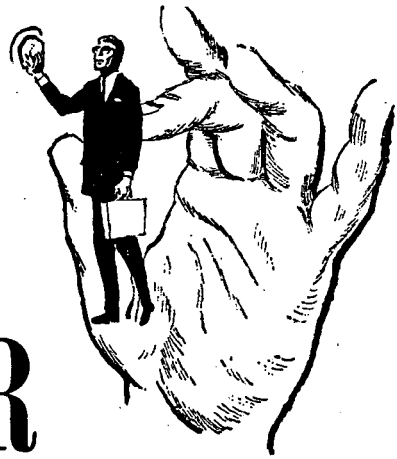
The icy-cold war might be conceivably won by some ingenious chemical invention which would induce ice to melt rapidly—but that seems impossible. Perhaps some way of shattering the icy giants with super-sonics might be the answer.

The battle goes on and for the time being we are holding our own, but the iceberg patrol dare never cease. Now the hope of defeating the frigid monsters lies in the hands of the meteorologists. Someday man will control the weather—and that will end the iceberg menace.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

By RON GOULART

Illustrator SUMMERS



JUNIOR PARTNER

Not many businesses run on timeclocks, anymore.

People dont like to punch in and out.

It's undignified. Much better if somebody just dusts

you with orange powder and puts you in a desk drawer.

SOMETIMES the street lights come on at six o'clock and sometimes not until nearly eight. Tonight they've come on at 7:35. Eventually I'll have to leave here. I've never really liked my father's office. I don't like it now that it's mine. I can't leave through the outer offices. I can't do that. And the fire escape is attached to the next office over. There's a ledge but it's four stories to the ground and I have a pretty strong fear of heights. That was one of the failings of mine that my father never tired of pointing out.

He's been dead nearly a month now. There aren't any pictures of him here. His vanity didn't run to the pictorial. Still, I can feel him all over this big damn room. The lousy spears and masks and all the other crap he acquired on his vacations. His vacation always came in July and August. Two months away and always back in time to send me off to whatever new school he'd picked.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Once when I was fourteen I came across one of his catalogues of military academies and there was a pin hole next to the name of the school I was going to that year. As though he'd just flipped the book open and stuck a pin with his eyes closed and that was why I was going to school in Arizona. But then I figured he'd done that just to get at me. I realized he wouldn't leave something like the directing of my life up to chance. April fool pranks were always in season with him.

My father was five feet six inches tall. He always gave his height in inches, though. Sixty six inches. He'd lost all his hair in his early twenties, during the period when he was bumming around Arabia or someplace and screwing the people out of whatever it was they had to be screwed out of. He and my mother separated when I was only a few months old and he kept me.

My mother died when I was eighteen. I don't remember what she looked like and I've never seen a picture of her. My father never mentioned her. I knew she'd died because there were small stories in all the San Francisco papers here. She died in Connecticut. In Westport. There were four papers here in those days I think. That was before the war. I'm nearly forty now.

THERE'S a birthdate on my records but I've never really been sure it's right. Although my father may have been using some kind of purloined letter psychology on me and let me have the real facts. I know I've never really believed him or trusted him from the time I was four or five. As far back as then I have always tried to check him up and prove him wrong. In Elko, Nevada, where I was supposed to have been born, they had no record of it at the city hall. My father and mother did live there in the early twenties, that I found out from old city directories.

It was probably a good thing he kept me scattered across the country. If I'd been here in San Francisco I would have spent all my time checking in the things he'd told me. I found that by the time I got to college I was an expert in research.

After I got out of the army after the war I wanted to get a teaching position at some small junior college outside of California. But somehow I ended up here. I started off as promotion manager of Arlen Keever Enterprises. That's my father. Arlen Keever, Sr. I, of course, am junior.

Every morning sharp at 8:45 all our employees showed up. Only once, the time Hollis fell off the cable car and broke his leg

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

was anyone ever late. Our employees, roughly 150 of them, split their lunches up. Half of them went from 12 to 12:45, the rest from 1 to 1:45. According to my father, only female employees are entitled to a coffee break, under the law. So every morning at 10:05 half the girls went to coffee. At 10:25 they came back. The rest went to coffee at 10:30 and came back at 10:50. A similar schedule held for the afternoon break.

That's how things ran until my father fell down dead right under the Haitian drums on the wall over there. Since I've assumed the running of Keever Enterprises we've been operating in what my father would have called a slipshod and haphazard manner.

As far as I can tell, and I know how to make an impressive variety of charts and graphs to check this sort of thing, our efficiency and production haven't dropped off since my father's methods stopped being used.

ABOUT five weeks ago, when he began to realize he was dying, my father explained his system to me in detail. I'd heard his rules and maxims as far back as I can remember. I'm sure he circled my crib and ran off some of his chats on virtue, punctuality, thrift and the rest. But the system was new to me.

Being a junior partner in Keever Enterprises I was allowed a full hour for lunch. When I came back that particular day there was a memo on my desk from my father.

"Junior," it said, "As soon as you straggle back from lunch please come and ask Miss Spaulding if you can see me. I have some urgent business I want to chat with you about. If you have been drinking please take one of the mints I've left on your desk, which could stand a good re-organization by the way."

There were two white after-dinner mints sitting next to my In box. The only other thing on the desk top was a file of letters I'd been going through. I put it in a file drawer and, dusting the desk top with my handkerchief, went out to Miss Spaulding's desk.

My father was free and after Miss Spaulding smiled and tilted her head at his door I went up to it and knocked. My knock was two short, three long.

"Enter, enter," called my father.

I did. "You wanted to see me, sir."

"That's right, junior. You figured my memorandui out perfectly. You're getting to be almost efficient. How's your wife?"

I've been divorced for over a year. "I don't hear from her. I

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

send the alimony checks to her bank and that's it."

"I'm not in very good shape," he said.

I'd suspected something might be wrong with him. He wasn't circling his desk, just sitting back in his swivel chair, his hands folded in his lap. "What is it?" I asked him.

"I've talked to Dr. Weiner and he says it's my old time piece."

My father rarely referred directly to any part of the body. "Your heart?"

"What the heck else would I mean." He pulled a cigar out of the black cigar humidor and screwed the lid back on. "I have a hunch I may be passing along beyond soon, junior."

I felt an odd pain across my chest. "You're not serious?"

"Do I have a reputation for sick humor?" His face wrinkled up. "Yes, I'm serious."

"But you can take it easy. Rest. Go to the desert. People do things like that," I said. "And it adds years to your life."

"Fiddle," he said. "Isn't your real concern over whether or not you can step into my boots and do the job. You don't care if I'm here or over in glory playing in the angel band. Do you?"

"Of course, I care, sir." I began to wonder if this was another one of his games.

"Your grandfather was a professional wrestler before he went into the cattle business," he said, slowly pushing himself back from his desk. "I've seen your grandmother bulldog a steer unaided. Does that suggest anything to you?"

"They must have had some great family quarrels."

HE gave a strong push and was free of his desk and chair and standing. "Your ancestors were tough, courageous people. Pioneer types. You know that one of our family was a close friend of Robert Burns. And poets weren't pansies in those days."

"I know, sir."

"It's time, junior," said my father, getting his hands locked behind him, "that you start giving a hand to heredity. When I've moved on I want you to run the show here, mind the store while your pop's out on the road."

I had a feeling he might be serious. He never called himself my pop unless he was in a straight mood. I said, "You don't have to talk like this, sir. I'm sure you'll live a long time."

"With a bum ticker? Like heck I will." He was at one of the wall safes. The one behind the African mask on the far wall. "You'll have to memorize the combinations to the safes. It's time for you to know them." He swung the safe open and took out

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

an old book, bound in some kind of soft pale yellow leather. "I picked this up in Europe some thirty years ago." He came slowly back to his desk and dropped the book on it. "Now for the other safe." He stood still for almost three minutes, breathing softly through his mouth. Then he crossed slowly to the big stand up safe next to the bookcases. "Whatever you do, butterfingers, don't drop the tray. I keep these things activated all the time. It saves work and trouble."

He smiled to himself, opened the safe and took out a cafeteria sized tray and brought it back to his desk. There seemed to be a set of chess pieces, or more likely, two sets on the tray. I glanced down at the figures. They weren't chessmen, but toy soldiers of some kind. I'm near-sighted and I had to get my glasses out to take a good look at the little figures.

By that time my father was standing in front of his desk, looking at the tray. "The staff," he said.

"What are they, sir? From a doll house."

"Take a good look," he said.

I bent down. The figures were dressed in business suits and dresses and skirts. "Very fine workmanship."

"Thank you. I made them myself. You'll find the directions and the recipes in that book."

"You want me to make dolls?"

"The faces," said my father. "Squint, junior. See the faces."

I GUESS I'd been avoiding that. Hey. There's Beckman. And Tom Hockford and Larry O'Brien. And Nancy Ferrier and . . ." I stopped. There was a four inch high doll replica of about half the people who worked for us. I looked up at my father. "You have them for everyone on the floor?"

He nodded. "Our entire staff, yes."

"It's certainly an interesting hobby, sir," I said. "I didn't know you went in for this sort of thing."

"Hobby my knee," he said, looking at the big wall clock. The clock is just like a school room clock, all our clocks are. The hands jumped to 1:40 and my father went around behind his desk. "Time for them to start coming back." He twisted the humidor lid the wrong way and a small drawer clicked out. There was a packet of orange powder in it. "The set of Conrad on the shelf over there is fake. You'll find more of this stuff," he jiggled the packet, "in there. About a year's supply left. Recipe's in this book when you run out. I find making up a two year supply each time is a good idea. It stays effective about that long."

"I see."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

OPENING a side drawer of his desk he pulled it out completely. He set the drawer on his desk next to the tray, sprinkled some powder over the figures on the tray and muttered something I couldn't catch. "Now when you do this, thumbs, be very careful. Don't squeeze." He picked a doll off the tray. It was Carl Kieffer, in accounting. He put the doll into the drawer and took another off the tray. When he'd finished all our employees were back in the drawer and the tray was empty. "Lunch is over."

Dimly through the thick door of his office I could hear the shufflings people make when they return to their desks after lunch.

I knew he wanted me to ask questions. I didn't want to give in, but finally I said, "What is all this exactly, sir?"

"About half voodoo and half European witchcraft. Have you got the system clear in your mind?"

"Voodoo?"

"Look," said my father, "when they're in the drawer they have to work. Except for going to the bathroom and such, that's allowed in the basic spell." He lifted the drawer gingerly and fitted it back into his desk. "When they're on the tray they're at lunch or coffee. I have a special auxiliary spell for doctor's appointments, family troubles, funerals. You'll find it all explained in the book. My marginal notes will show you how the spells can be updated to fit contemporary business needs." He sat back in his chair. "At five sharp you transfer them out of the drawer and back onto the tray. That means they can go home and be on their own until the next morning. If you should want overtime just leave them in the drawer. If you want one of them to come back use a little powder and take him off the tray and put him back in the drawer. That'll fetch him back here in a hurry." He tapped his forefinger on the edge of his desk. "Remember, junior. There's no room for clumsiness. Anything that happens to the dolls while they're activated happens to the person, too. And I keep them activated all the time. You see, to put the doll in sympathy with the person you have to apply an individual spell. It's too much trouble to activate each one every day. So I leave them on." He rocked slightly in his chair. "I was only clumsy once. That's how Hollis broke his leg." He rocked forward and stayed there. "The working and staying on the job spells you can apply to the whole batch. That kind of spell has to be worked everyday. Are you absorbing this?"

I watched my father for a moment. "I'm not sure I understand all you're saying, sir."

"Well," he said. "I don't see

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

why not. It's certainly simple enough. Even you should be able to understand it. You'll have to learn to handle it, because when I pass on you, unfortunately, will be running things." He turned away from me and looked out the window.

"Running what?"

He spun back, frowning. "Isn't it obvious enough? You should know by now that you can't trust the average office worker, nor expect him to give a damn. Do you think if you leave them on their own they'll do anything but loaf around and complain about salaries? With these dolls I can control them. I can keep them at their desks, regulate their lunch hours and make certain that I get the maximum of work and efficiency that I am paying them for. He smiled, but not quite at me. "I picked up the book in Provence nearly thirty years ago. The work of a monk who lived in the late 1400's. He was burned as a result of his researches, but a few copies of his book survived. By putting his findings together with my knowledge of the way things are done in Haiti and few other places I came up with these dolls."

"You're saying that all the years I've been working here the people who work for us have been controlled by some kind of magic?"

"Some of this may not seem ethical to you," said my father. "But it isn't always a question of right and wrong. The problem centers around what's best for most people. I've kept a lot of people working with this system, even during Roosevelt's depression."

"You're serious?"

"You bet your life," he said, pushing himself to a standing position. "You're going to learn how to use the dolls. Keever Enterprises will keep going as it has been after I'm gone. You're the only son I have and so you're going to do this and you're not going to let me down."

"All right, father. All right." I shook my head several times. "I'm not feeling well. I'd like to take the afternoon off."

"You might like to," he said, "but you won't. At a quarter to five you'll be right back in here and I'll show you how to send them all home." He sank into his chair like a slowly deflating balloon. "Here. I'll give you the safe combinations." He eased a sheet of paper off the memo pad, wrote some numbers on it and held it out.

I reached down and took it. "Very well, sir. I'll try to start learning them."

"You'll know the combinations before you leave right now. Come on. Get them memorized and then destroy that paper."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He had me read off the numbers. And then recite them without looking. After about fifteen minutes he was satisfied. "Be back in here at 4:45, junior."

I nodded and started for the door. I stopped, my chest tightening again. "Father," I said.

"Yes, junior?"

"Is there a doll for me?"

"I don't need one for you," he said.

OUTSIDE I tried not to look at anyone. I didn't have a door on my office but I sat facing away from everyone.

I got out the file of letters I'd been checking through and opened it. Gradually, as I went over what he had said in my mind, I came to feel that this was probably another of his tricks. Some elaborate prank he spent months working out.

But as I went back to his office just before quitting time I found I still couldn't bring myself to look directly at anyone. If someone called a greeting I waved without turning my head.

I couldn't even face Miss Spaulding squarely when I asked to see my father.

When I was back inside with him he said," Let's hear the combinations, junior."

I had a feeling I was going to stammer, but I got hold of myself and, even though he was saying, "Come on, come on", I took my time and recited the numbers correctly.

"Well," said my father, putting the drawer up on his desk again. "You did very well. Now stand by. I'll get the tray and you can help me put them away for today."

Getting my glasses on I looked into the drawer. Each doll had its own private pigeon hole.

My father got the empty tray from the safe and brought it back, putting it next to the drawer. At exactly five he started taking the dolls out of the drawer and putting them back on the tray. "You can lift a few, junior. Do it gently, not too much thumb."

From the outer office, filtered by the thick door, came faint sounds of people leaving.

When the dolls were all back on the tray my father said, "They're on their own until tomorrow. You'll be here at 7:30 sharp to start them on their way to work."

FOR the next two days we went through the same ritual. I wasn't able to get much sleep. Naturally enough I kept dreaming about dolls and tiny offices filled with very small employees.

Then on a Friday, nearly a month ago, my father died. We had put the dolls all on their tray and he had locked them away in the safe, on their own for the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

weekend. The offices were empty and I had gone back to my desk to pick up a batch of work I was taking home. The walls of my father's office are so substantial that I never heard him fall. But when I went back and knocked my knock nothing happened. I tried the knock twice and then went in, prepared to apologize. He was on the floor, quite still.

It flashed through my mind that this might be some joke of his. That if I cried out he would jump up and smile at me. Still I knew he was dead. And, quietly and efficiently, in a very business like manner, I took care of all the details.

Work at Keever Enterprises resumed on the following Wednesday. When I arrived that morning, a little after nine, I found all our employees there. Apparently they didn't need the dolls to make them come in. As I began to fall into the routine of managing the business I came to feel that the dolls had been simply another of my father's elaborate tests.

I did look through the monk's book. I studied it and my father's penciled in instructions and additions. I could find no formula for de-activating the dolls. There were a great many erasures and corrections and I may have missed it. Then, too, there was quite a lot of it I just didn't understand.

The dolls themselves I left locked away. The people in the office came and went more casually, but I figured that was simply because my father was gone and I was known to be unlike him. I didn't want to believe it was because I wasn't sprinkling orange powder on the dolls every morning.

As I sat here, trying to keep my mind on the running of Keever Enterprises, I kept looking at the safe that held the dolls. I made up my mind I didn't want them here. The thing to do was move them. I'd store them in the family home on Pacific Heights, where I was now living again. Put them up in the attic, wrapped in cotton. That was the answer. Put them away and forget them.

I knew my father wanted me to be bothered by the dolls. He'd expected me to fool around with them, experiment. Even do research on the theories behind them. No more. Now that he was dead I wasn't going to spend one more day of my life checking his stories and testing his lies.

AT noon today—and I took two hours for lunch and had two gibsons—I got a large box and lots of tissue paper from the gift wrapping department at I. Magnin's. I had to give them ten dollars before they'd give me the box without anything in it.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I came back here and went over to the big safe. It took me three tries but I finally got the combination right and opened it. I carefully got out the tray of dolls.

Just short of the desk I tripped on a dropped pencil and the tray slammed against the desk and then fell toward the floor. I tried to catch the tray but I lost my balance all together and fell forward on top of the tray and the dolls.

I made quite a lot of noise when I fell. But I'm almost certain I heard shouting and cries of pain from outside, through the heavy door. Every last doll is broken, one way or another. I haven't heard a sound from out there since then.

I don't know what to do. I'm afraid to look outside into the offices. I have the feeling that somehow I've done exactly what my father expected me to do. He's criticized my clumsiness since I was five years old.

THE END

ARE WE HERE TO STAY?

By CHARLES RECOUR

THE BIOLOGIST, Loren C. Eiseley, poses and answers an interesting question: "Is Man here to stay?" That question is not at all trivial, though we need lose no sleep over it. Eiseley surveys the biological world and asks the question in light of observed facts. All throughout evolution, life forms have eventually been supplanted by other and less specialized forms after a time. Will Man eventually be displaced, too?

It is clear that Man has come into equilibrium with his environment and it appears as if nothing, not even his tremendous penchant for devising self-destructive weapons, can shake that position. To all intents and purposes, we see that Man is here to stay.

We can judge Man's situation if we compare him with another creature remarkably like him, the ant. You might think that the comparison is unfair, but the ant is, excepting brainpower and tool-using ability, remarkably like Man. He has adapted himself perfectly to his environment, even to the point of cultivating food. Furthermore, the ant has met his situation and conquered it. It is estimated that ants have not changed very much in the *eighty million* years they've existed on Earth. If an ant can so well adapt and fit himself to his situation, what about Man?

Everything we've said so far seems to favor the immortality of the human race. Assuming that the Earth isn't shattered by a hydrogen bomb, we can imagine that Man will always occupy his present position. Or can we? That's the question Eiseley really poses, and he asks it because of an obscure biological law called "Cope's law." Actually it isn't a law; rather, it's an abstraction of observation taken over a long time, and it seems to be immutable. We have no reason to believe that it shouldn't apply to all species, including Man.

Cope's "law" is a generalization which says that an advanced species develops, not from a highly specialized species—like Man or the ants—but from an unspecialized type, utterly adaptable. Cope cites numerous examples of this. Mammals sprang from a reptile whose only characteristic was a bloodstream with a controllable temperature. Amphibians, for another example, came not from a perfectly adjusted fish, but from a sluggish mud-seeker.

A study of the displacement of various species through time shows many more examples of this sort of thing. And that refers us to the original question: "Will Man be displaced?" If Cope's principle is sound, and we think it is, eventually Man is going to be supplanted by some other, more highly adaptable life-form. Man is adaptable, it's true, but so specialized, that any major catastrophe can knock him for a loop.

What species will provide our successors? From where—the air, the sea, or the jungle—will they come?

★ ★ ★

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE SUCCESS MACHINE

Mechanical brains are all the rage these days, so General Products just had to have one. But the blamed thing almost put them out of business. Why? It had no tact. It insisted upon telling the truth!

By HENRY SLESAR

THE Personnelovac winked, chittered, chortled, chuckled, and burped a card into the slot. Colihan picked it up and closed his eyes in prayer.

"Oh, Lord. Let this one be all right!"

He read the card. It was pink.

"Subject #34580. Apt. Rat. 34577. Psych. Clas. 45. Last per.

Vac. An. 3/5/98. Rat. 19. Cur. Rat. 14.

Analysis: Subject demonstrates decreased mechanical coordination. Decrease in work-energy per man-hour. Marked increase in waste-motion due to subject's interest in non-essential activities such as horseracing. Indication of hostility towards superiors.

Recommendation: F i r e him."

Colihan's legs went weak. He sat down and placed the card in front of him. Then, making sure he was unobserved, he broke a company rule and began to Think.

Something's wrong, he thought. *Something is terribly wrong. Twenty-four pink cards in the last month. Twenty-four out of forty. That's a batting average of* —He tried to figure it out with a pencil, but gave it up as a bad job. *Maybe I'll run it through the Averagovac,* he thought. *But why bother? It's obvious that it's high. There's obviously SOMETHING WRONG.*

The inter-com beeped.

"Ten o'clock department head meeting, Mr. Colihan."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The steel brain was having more fun than people.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"All right, Miss Blanche."

He rose from his chair and took the pink card with him. He stood before the Action Chute for a moment, tapping the card against his teeth. Then, his back stiffened with a sense of duty, and he slipped the card inside.

The meeting had already begun when Colihan took his appointed place. Grimswitch, the Materielovac operator looked at him quizically. *Damn your eyes, Grimswitch,* he thought. *It's no crime to be three minutes late. Nothing but a lot of pep talk first five minutes anyway.*

"PEP!" said President Moss at the end of the room. He slammed his little white fist into the palm of his other hand. "It's only a little word. It only has three little letters. P - E - P. Pep!"

Moss, standing at the head of the impressive conference table, leaned forward and eyed them fixedly. "But those three little letters, my friends, spell out a much bigger word. A *much* bigger word for General Products, Incorporated. They spell PROFIT! And if you don't know how *profit* is spelled, it's M - O - N - N - E - Y!"

There was an appreciative laugh from the assembled department heads. Colihan, however, was still brooding on the parade of pink cards which had been emerging with frightening regularity from his think-machine, and he failed to get the point.

"Naughty, naughty," Grimswitch whispered to him archly. "Boss made a funny. Don't forget to laugh, old boy."

Colihan threw him a sub-zero look.

"Now let's be serious," said the boss. "Because things *are* serious. Mighty serious. Somewhere, somehow, *somebody's* letting us down!"

The department heads looked uneasily at each other. Only Grimswitch continued to smile vacantly at the little old man up front, drumming his fingers on the glass table top. When the President's machine-gunning glance caught his eyes, Colihan went white. *Does he know about it?* he thought.

"I'm not making accusations," said Moss. "But there is a let-down someplace. Douglas!" he snapped.

Douglas, the Treasurer, did a jack-in-the-box.

"Read the statement," said the President.

"First quarter fiscal year," said Douglas dryly. "Investment capital, $17,836,975,-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

238.96. Assets, $84,967,442,-279.55. Liabilities, $83,964,-283,774.60. Production costs are—"

Moss waved his hand impatiently. "The meat, the meat," he said.

Douglas adjusted his glasses. "Total net revenue, $26,876,924.99."

"COMPARISON!" The President screamed. "Let's have last first quarter, you idiot!"

"*Ahem!*" Douglas rattled the paper in annoyance. "Last first quarter fiscal year net revenue $34,955,376.81. Percent decrease—"

"Never mind." The little old man waved the Treasurer to his seat with a weary gesture. His face, so much like somebody's grandmother, looked tragic as he spoke his next words.

"You don't need the Accountovac to tell you the significance of those figures, gentlemen." His voice was soft, with a slight quaver. "We are not making much p - r - o - f - i - t. We are losing m - o - n - e - y. And the point is—what's the reason? There must be *some* reason." His eyes went over them again, and Colihan, feeling like the culprit, slumped in his chair.

"I have a suggestion." said the President. "Just an idea. Maybe some of us just aren't showing enough p - e - p."

There was a hushed silence.

The boss pushed back his chair and walked over to a cork-lined wall. With a dramatic gesture, he lifted one arm and pointed to the white sign that covered a fourth of it.

"See that?" he asked. "What does it say?"

The department heads looked dubious.

"*Well, what does it say?*" repeated Moss.

"ACT!" The department heads cried in chorus.

"Exactly!" said the little old man with a surprising bellow. "ACT! The word that made us a leader. The word that guides our business destiny. The world that *built* General Products!"

He paced the floor. The chair in the conference room creaked as the department heads stirred to follow him with their eyes.

"ACT is our motto. ACT is our password. ACT is our key to success. And why not? The Brains do the thinking. All of us put together couldn't think so effectively, so perfectly, so honestly as the Brains. They take the orders, designate raw materials,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

equipment, manpower. They schedule our work. They analyze our products. They analyze our people."

Colihan trembled.

"There's only one important function left to us. And that's ACT!"

The President bowed his head and walked slowly back to his seat. He sat down, and with great fatigue evident in his voice, he concluded his polemic.

"That's why we must have pep, gentlemen. Pep. Now—how do you spell it?"

"P! E! P!" roared the department heads.

The meeting was over. The department heads filed out.

Colihan's secretary placed the morning mail on his desk. There was a stack of memos at least an inch thick, and the Personnel Manager moaned at the sight of it.

"Production report doesn't look too good," said Miss Blanche, crisply. "Bet we get a flood of aptitude cards from Morgan today. Grimswitch has sent over a couple. That makes eleven from him this month. He really has his problems."

Colihan grunted. *He deserves them,* he thought.

"How did the meeting go?"

"Huh?" Colihan looked up. "Oh, fine, fine. Boss was in good voice, as usual."

"I think there's an envelope from him in the stack."

"What?" Colihan hoped that his concern wasn't visible. He riffled through the papers hurriedly, and came up with a neat white envelope engraved with the words: OFFICE OF THE PRESIDENT.

Miss Blanche watched him, frankly curious. "That will be all," he told her curtly.

When she had left, he ripped the envelope open and read the contents. It was in Moss's own cramped handwriting, and it was a request for a three o'clock "man-to-man" talk.

Oh, Lord, he thought. *Now it's going to happen.*

President Moss was eating an apple.

He ate so greedily that the juice spilled over his chin.

Sitting behind his massive oak desk, chair tilted back, apple juice dappling his whiskers, he looked so small and unformidable, that Colihan took heart.

"Well, Ralph—how goes it?"

He called me Ralph, thought Colihan cheerfully. *He's not such a bad old guy.*

"Don't grow apples like

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

they used to," the President said. "This hydroponic stuff can't touch the fruit we used to pick. Say, did you ever climb a real apple tree and knock 'em off the branches?"

Colihan blinked. "No, sir."

"Greatest thrill in the world. My father had an orchard in Kennebunkport. Apples by the million. Green apples. Sweet apples. Delicious. Spy. Baldwin." He sighed. "Something's gone out of our way of life, Ralph."

Why, he's just an old dear, thought Colihan. He looked at the boss with new sympathy.

"Funny thing about apples. My father used to keep 'em in barrels down in the basement. He used to say to me, 'Andrew,' he'd say, 'don't never put a sour apple in one of these barrels. 'Cause just one sour apple can spoil the whole derned lot.' " The boss looked at Colihan and took a big noisy bite.

Colihan smiled inanely. Was Moss making some kind of point?

"Well, we can't sit around all day and reminisce, eh, Ralph? Much as I enjoy it. But we got a business to run, don't we?"

"Yes, sir," said the Personnel Manager.

"Mighty big business, too. How's your side of it, Ralph? Old Personnelovac hummin' along nicely?"

"Yes, sir," said Colihan, wondering if he should voice his fears about the Brain.

"Marvelous machine, that. Most marvelous of 'em all, if you ask me. Sizes up a man beautifully. And best of all, it's one hundred percent *honest.* That's a mighty important quality, Ralph."

Colihan was getting worried. The boss's conversation was just a little too folksy for his liking.

"Yes, sir, a mighty fine quality. My father used to say: 'Andrew, an honest man can always look you in the eyes.' "

Colihan stared uncomprehendingly. He realized that Moss had stopped talking, so he looked him squarely in the eyes and said: "He must have been a fine man, your father."

"He was honest," said Moss. "I'll say that for him. He was honest as they come. Did you ever hear of Dimaggio?"

"It sounds familiar—"

"It should. Dimaggio was a legendary figure. He took a lantern and went out into the world looking for an honest man. And do you know some-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thing? He couldn't find one. You know, Ralph, sometimes *I* feel like Dimaggio."

Colihan gulped.

"And do you know why? Because sometimes I see a thing like *this*—" the boss's hand reached into the desk and came out with a thick bundle of pink cards—"and I wonder if there's an honest man left in the world."

He put the cards in front of Colihan.

"Now, sir," said Moss. "Let's talk a little business. These cards are all pink. That means dismissal, right? That's twenty-four people fired in the last month, is that correct?"

"Yes, sir," said Colihan unhappily.

"And how many cards went through the Personnelovac this month?"

"Forty."

"So that's twenty-four out of forty. A batting average of—" The boss's brow puckered. "Well. Never mind. But that's quite an unusual record, wouldn't you say so?"

"Yes, sir, but—"

"*So* unusual that it would call for immediate ACTION, wouldn't it?" The President's face was now stormy.

"Yes, sir. But I checked the Brain—"

"Did you, Ralph?"

"Yes, sir. And the Maintainovac said it was perfect. There's nothing wrong with it."

"*Nothing* wrong? You call twenty-four firings out of forty *nothing?*" The old man stood up, still holding the core of his apple.

"Well, I don't understand it either, Mr. Moss." Colihan felt dew on his forehead. "Nothing seems to satisfy the Brain anymore. It seems to develop higher and higher standards, or something. Why, I'm not sure it wouldn't even fire—"

"WHO?" said Moss thunderously. "WHO wouldn't it even fire?"

The thunder hit Colihan squarely. He swallowed hard, and then managed to say:

"Anybody, sir. Me, for instance."

The President's face suddenly relaxed.

"I'm no tyrant, my boy. You know that. I'm just doing a job, that's all."

"Of course, sir—"

"Well, all I want you to do is keep your eye on things. It could be a coincidence of course. That's the *logical* explanation." He narrowed his eyes. "What do *you* think, Ralph?"

"Me, sir?" said Ralph,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wide-eyed. "I don't *think*, sir. I ACT, sir!"

"Good boy!" The boss chuckled and clapped his hand on Colihan's shoulder. Moss was momentarily satisfied.

The Personnelovac burped.

Colihan picked up the card with a groan. It was pink.

He walked over to the Action Chute and dropped it inside. As it fluttered down below, Colihan shook his head sadly. "Thirty-one," he said.

He placed the next personnel record into the Information chamber. He flipped the lever, and the Personnelovac, now hot with usage, winked, chittered, chortled, and chuckled with amazing speed. The burp was almost joyful as the card popped out. But Colihan's face was far from joyful as he picked it up.

Pink.

"Thirty-two," he said.

The next card was from Grimswitch's department. It was Subject #52098. The number was familiar. Colihan decided to check the file.

"Sam Gilchrist," he said. "*Couldn't* be anything wrong with Sam. Why, he's a blinkin' *genius!*"

Flip. Wink. Chitter. Chortle. Chuckle. BURP!

Pink.

"Poor Sam!" said Colihan.

He fed the other records through quickly.

Pink.

Pink.

PINK.

At the end of the day, Colihan worked laboriously with a blunt-pointed pencil. It took him fifteen minutes for the simple calculation.

"Sixty-seven tests. Twenty-three okay. Forty-four—"

Colihan put his hands to his head. "What am I going to *do?*"

Grimswitch followed Colihan down the hall as he came out of the boss's office for the third time that week.

"Well!" he said fatuously. "Quite the teacher's pet, these days. Eh, Colihan?"

"Go away, Grimswitch."

"On the carpet, eh? Temper a little short? Don't worry." Grimswitch's beefy hand made unpleasant contact with the Personnel man's shoulder. "Your old friends won't let you down."

"Grimswitch, will you please let me alone?"

"Better watch that think-machine of yours," Grimswitch chuckled. "Might fire *you* next, old boy."

Colihan was glad when Morgan, the production operator, hailed Grimswitch away. But as he entered his own of-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fice, Grimswitch's words still troubled him. *Grimswitch,* he thought. *That fat piece of garbage. That big blow-hard. That know-it-all.*

Almost savagely, he picked up the day's personnel cards and flipped through them carelessly.

Grimswitch, that louse, he thought.

Then he had the Idea.

If Grimswitch was still chewing the fat with Morgan, then his secretary would be alone—

If he called her and asked for Grimswitch's record—no, better yet, got Miss Blanche to call—

Why not? he thought. *After all, I am the Personnel Manager. Sure, it's a little irregular. He IS a department head. But it's my job, isn't it?*

Colihan flipped the intercom and proceded to call Miss Blanche.

His hand shook as he placed Grimswitch's card into the Personnelovac.

The machine, though still heated by the day's activity, seemed to take longer than usual for its chittering, chuckling examination of the pin-holed facts on the record.

Finally, it gave a satisfied burp and proferred the result to Colihan's eager hand.

"Aha!" cried the personnel man gleefully.

He walked over to his desk, wrote a quick note on his memo pad, and placed both note and card into an envelope. He addressed it to: OFFICE OF THE PRESIDENT. Then he dropped it into the Action Chute. When it was out of sight, he rubbed his hands together in happy anticipation.

When Miss Blanche announced that President Moss himself was in Colihan's outer lobby, the Personnel Manager spent a hasty minute in straightening up the paper debris on his desk.

The old man came striding into the room, exhibiting plenty of p-e-p, and he seated himself briskly on Colihan's sofa.

"Sharp eyes, Ralph," he said. "Sharp eyes and a quick wit. This business demands it. That was a sharp notion you had, doing a run-through on Grimswitch. Never trusted that back-slapping fellow."

Colihan looked pleased. "Trying to do a job, sir."

"Put your finger on it," said Moss. "Hit the nail on the head. It's just like my

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

father said: 'Trees go dead on the top.' Colihan—" The boss leaned forward confidentially. "I've got an assignment for you. Big assignment."

"Yes, sir!" said Colihan eagerly.

"If Grimswitch is a sour apple, maybe *other* department heads are, too. And who knows? IT knows."

Moss pointed a finger at the Personnelovac.

"I'm rounding up all the aptitude records of the department heads. They'll be in your hands in the next couple of days. Feed 'em in! Root 'em out! Spot the deadwood, Colihan! ACT!"

"ACT!" echoed Colihan, his face flushed.

The old man got up and went over to the Brain.

"Marvelous machine," he said. "Honest. That's what I like about it."

As Moss went out the door, Colihan could have sworn he saw the Personnelovac wink. He walked over to it and fingered the lever. It was turned off, all right.

It was an interesting week for Colihan.

Morgan, the production man, was fired.

Grimswitch came up to see the Personnel man and tried to punch him in the nose. Fortunately, he was a little too drunk, and the blow went wild.

Seegrum, the shipovac operator, was fired.

Douglas, the Treasurer, was permitted to keep his job, but the Personnelovac issued a dire threat if improvement wasn't rapidly forthcoming.

Wilson, the firm's oldest employee, was fired.

In fact, seven out of General Product's twelve department heads were greeted by the ominous pink card.

Colihan, no longer plagued by doubt, felt that life was definitely worth living. He smiled all the time. His memos were snappier than ever. His heels clicked merrily down the office hallways. He had p - e - p.

Then, the most obvious thing in the world happened —and Colihan just hadn't foreseen it.

His record card came up.

"Have you run through the stack yet?" Miss Blanche asked.

"Er—just about." Colihan looked at her guiltily. He pushed his glasses back on the bridge of his nose. "Couple more here," he said.

"Well, we might as well finish up. Mr. Moss would

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

like to have the schedule completed this afternoon."

"It will be. That's *all*, Miss Blanche."

His secretary shrugged and left. Colihan went to the Personnelovac with the record in his hand. The file number was 630.

"Don't let me down," he told the Brain.

He placed the pin-holed card into the machine and flipped the lever. It winked, chittered, chortled, and chuckled with almost sinister softness. When the card was burped out at the other end, Colihan took it out with his eyes firmly shut.

He walked over to the Action Chute mechanically. His hand hesitated before he dropped it inside. Then he changed his mind, walked back to the desk, and tore the pink card into the smallest possible shreds.

The inter-com beeped.

"Mr. Moss wants you," said his secretary.

"Colihan!"

"Yes, sir?"

"Don't act so innocent, Colihan. Your report isn't complete. It should have been ready by now."

"Yes, sir!"

"You're not ACTING, Colihan. You're stalling!"

"*No*, sir."

"Then where's *your* Personnelovac report, Colihan? Eh? Where is it?"

Colihan wrung his hands. "Almost ready, sir," he lied. "Just running it through now, sir."

"Speed it up. Speed it up! Time's a'wastin', boy. You're not *afraid*, are you, Colihan?"

"No, *sir*."

"Then let's have it. No more delay! Bull by the horns! Expect it in an hour, Colihan. Understand?"

"Yes, sir!"

The boss clicked off. Colihan groaned audibly.

"What can I do?" he said to himself. He went to the Brain and shook his fist helplessly at it. "Damn you!" he cursed.

He had to think. He had to THINK!

It was an effort. He jerked about in his swivel chair like a hooked fish. He beat his hands on the desk top. He paced the floor and tore at the roots of his hair. Finally, exhausted, he gave up and flopped ungracefully on the office sofa, abandoning himself to the inevitable.

At that precise moment, the mind being the perverse organ it is, he was struck by an inspiration.

The Maintainovac bore an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

uneasy resemblance to Colihan's own think-machine. Wilson, the oldest employee of General Products, had been the operator of the maintenance Brain. He had been a nice old duffer, Wilson, always ready to do Colihan a favor. Now that he had been swept out in Colihan's own purge, the Personnel Manager had to deal with a new man named Lockwood.

Lockwood wasn't so easy to deal with.

"Stay out of my files, mister," he said.

Colihan tried to look superior. "I'm the senior around here, Lockwood. Let's not forget that."

"Them files is my responsibility." Lockwood, a burly young man, stationed himself between Colihan and the file case.

"I want to check something. I need the service records of my Brain."

"Where's your Requisition Paper?"

"I haven't got *time* for that," said Colihan truthfully. "I need it *now*, you fool."

Lockwood set his face like a Rushmore memorial.

"Be a good fellow, can't you?" Colihan quickly saw that wheedling wasn't the answer.

"All right," he said, starting for the door. "I just wanted to help you."

He opened the door just a crack. Sure enough, Lockwood responded.

"How do you mean, help *me?*"

"Didn't you know?" Colihan turned to face him. "I'm running through an aptitude check on the Personnelovac. Special department head check. Mr. Moss's orders."

"So?"

"I was just getting around to yours. But I figured I'd better make sure the Brain was functioning properly." He grew confidential. "You know, that darned machine has been firing *everyone* lately."

A little rockslide began on Lockwood's stoney face.

"Well . . ." he said. "If that's the case—"

"I knew you'd understand," said Colihan very smoothly.

Eagerly, the Personnel Manager collated the records of the Personnelovac. They were far more complex than any employee record, and it took Colihan the better part of an hour.

Any moment he expected to hear the President's angry voice over the inter-com. His

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

anxiety made him fumble, but at last, the job was done.

He slipped the record, marked by a galaxy of pinholes, into the Brain.

"Now we'll see," he said grimly. "Now we'll find out what's eating this monster."

He flipped the switch.

The Personnelovac winked.

It was several minutes before it digested the information in its chamber. Then it chittered.

It chortled.

It chuckled.

Colihan held his breath until the BURP came.

The card appeared. It read:

"Subject #PV8. Mech. Rat. 9987. Mem. Rat. 9995. Last Per. Vac.

An. None. Cur. Rat. 100.

Analysis: Subject operating at maximum efficiency. Equipped to perform at peak level. Is completely honest and does not exhibit bias, prejudice, or sentiment in establishing personnel evaluations. Cumulative increase in mnemonic ability. Analytic ability improving."

Colihan walked slowly over to the Action Chute as he finished reading the card.

"However," it read, *"because of mechanistic approach to humanistic evaluation, subject displays inability to incorporate human equation in analytical computation, resulting in technically accurate but humanistically incorrect deductions.*

Recommendation: Fire him."

Colihan dropped the pink card into the chute. In half an hour, the Action wheels of General Products concluded their work, and the Personnelovac had winked for the last time. **THE END**

Sinking Continents

By J. R. MARKS

THAT THE earth's temperature is slowly rising is an observational fact. As more and more data are accummulated the exact rate will be determined. And this temperature rise may have some rather chilling fantastic effects.

For one thing, the oceans are rising—at a very slow rate—but rising. Every three hundred years the seas thrust themselves up just one more foot! And where does this extra water come from?—it comes from the slowly melting Polar caps!

It has been estimated that if the ice which sheaths Greenland were to melt, there is such an enormous amount of it, that it would cause the oceans of the world to rise about one hundred and fifty feet! And this is only a small portion of all the ice that covers the Polar Regions. Such an event of course would occur slowly and only over many thousands of years time, but its effects would be all to the good. True some of our coast-lines would disappear, but on the other hand, vast areas of fertile ground beneath the ice-caps would be exposed to agriculture.

This warming up of the Arctic Regions is further shown by the fact that fish are breeding farther north, Alaskan forests are growing northwards and new land is beginning to appear. Come to the North Pole—it's a perfect summer resort!

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SCIENCE AND SUPERMAN: AN INQUIRY

Every s-f fan knows and enjoys Poul Anderson's stories. Now the brilliant young writer presents a startling theory in an essay on the development of man . . . You may agree with Anderson's ideas . . . we don't . . . but they are certainly worth thinking about.

By POUL ANDERSON

THERE is an old saying, which I have used before but cannot resist bringing forth again, to the effect that: "The optimist thinks this is the best of all possible worlds; the pessimist is afraid he's right." It's as applicable to the biological future of the human race as it is to politics and personal relationships.

Since our ancestors, a million or so years ago, were presumably rather apish creatures, it seems natural to extrapolate the curve of their development and predict that our descendants will be very near to gods. It's a fascinating concept, which I've played with myself. Olaf Stapledon, Stanley Weinbaum, and A. E. van Vogt produced science fiction classics on this theme. But I think we're also obliged to take a hard, critical look at the underlying assumptions. If nothing else, such a re-examination often suggests new fictional treatments of an apparently exhausted motif.

We can begin by dismissing any Homo Superior born of normal human parents. The three writers I mentioned made some quasi-mystical postulates to justify this in their stories: unity of life and so on. That's legitimate science fiction, of course; it might even, conceivably, be true. But scientific speculation proper must ground itself firmly on what we know. And all our present knowledge denies the possibility of such a birth.

True, there have been some fairly spectacular hereditary abnormalities. One thinks of colorblindness, hemophilia, or the English "porcupine man." On examination these cases turn out

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to involve a very few genes, usually a single one. Following such a mutation, the whole genetic complex then readusts itself often requiring some generations to do so. For example, when industrial melanism* was first observed in the British peppered moth, the dark new variety still had some white spots; now it doesn't. In other words, the mutated characteristic of black coloration was at first only relatively dominant, but has since become almost absolutely so. Incidentally, it's quite unusual for a mutation to be a dominant in any degree.

Man's genetic structure is exceedingly complicated. Something like twenty separate genes are involved in as simple a matter as hair color. (The same genes also participate in other combinations governing other traits.) "Improbable" is hardly the word for all the billions of exactly correct simultaneous alterations which would have to occur at the same instant, to produce a zygote of a new species without throwing the genetic balance hopelessly out of kilter. Water will freeze on a hot stove long before any such thing happens.

And even if a Homo Superior embryo should somehow be formed, I doubt very much if it would survive. Its enzyme and hormone systems would be too different from the mother's. It would probably die and be resorbed before it even got to the fetus stage.

No, unless that "unity of life" really exists—there's no evidence for it, and plenty against it—evolution will have to proceed in man as gradually as in every other genus. The question before the house is, Will it actually do so?

If asked what improvements could be made in our race, we think at once of getting rid of the vermiform appendix. Those who have considered the subject a bit more will advocate some changes in the spine, such as fusing the bottom few vertebrae; and they will ask for a rupture-proof abdomen and properly draining sinuses. Anyone with flat feet can wistfully imagine a stronger arch. The little toe, while harmless, has no real function and would seem fated to disappear; likewise body hair, except the pubic and axillary—even this is sexual display only and could be dispensed with—and the male beard. Beyond gross anatomy, we could use eyes less subject to optical deformation, veins less likely to go varicose on us, arteries which don't harden or blow out. We would like immunity to all diseases, including the mental ones. This latter development presupposes not only a well-adjusted biochemistry, unable to develop those imbalanced which apparently cause schizophrenia, but a nervous system too stable

*In areas where coal dust has blackened the landscape, dark coloration has become advantageous and has actually developed.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

for neurosis. Enormous power of intellect's almost a defining quality of the traditional superman. Most people would in addition make him less selfish and predatory than today's humankind.

These and similar traits are straightforward developments from man-as-we-know-him. We can now walk around our Homo Superior and hang totally new powers such as telepathy and conscious control of all body functions on him, like ornaments on a Christmas tree. But I do not plan to discuss these. All the arguments that followed will apply equally well to such speculative characteristics.

One small but important objection can be raised at once to our picture of superman. Quite a few of his differences from us are desirable only in the context of our own social and technological culture. The human foot, for example, is perfectly well adapted for walking on soft earth. Hard pavements and badly designed shoes bring on fallen arches, not any inherent deficiency. Arteriosclerosis, some mental disease, and various other forms of breakdown seem to be closely connected with diet, exercise, and/or nervous strain. It would make far more sense to adjust our mode of living than to wait for evolution. And this is doubtless what we will do, albeit unconsciously: for who believes that the present-day form of civilization will last forever?

Certain other goals are just plain impossible, e.g. permanent natural immunity to all diseases. Bacteria and viruses evolve too. After a few years of wonder drugs, we are beginning to see wonder drug-proof germs. Imagine a strain of man suddenly appearing, with metabolism so alien that no existing microorganism could live in him. How long would it take first one, then two, then many germ species to develop adaptations which would enable them to use this free lunch counter!

We do have many built-in flaws, such as our sinuses, which try to drain straight out of our faces as if we were still quadrupeds. But at this point our own cleverness intervenes. Sanitation makes unnecessary any degree of natural immunity to a host of diseases. Immunization reinforces our inborn defenses against most others. Surgery restores the slipped spinal disc, drains the inflamed cavity, patches up the hernia. And now a chemotherapeutic arsenal is being accumulated, which will doubtless before long cure such maladies as schizophrenia. We shall have more to say later about the role of the doctor; for the time being, the most unimaginative extrapolation of medical progress will show us that there is probably no biological problem which we *must* solve by evolution. True, it would be convenient not to get appendicitis, but it is no longer a question of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

life and death. And natural selection works through differential survival—the relative number of descendants which an organism has—not through minor individual afflictions.

Mutatis mutandis, the same argument applies to great muscular strength, hawklike eyes, super-fast reactions, and similar Boy Scout ideals. We have machines (or will have them, in the foreseeable future) which can so far outdo us in all these respects that there is no evolutionary point in our own improvement.

If civilized man is under no pressure to develop much further physically, and therefore apparently will not do so, what about his mental capacity? What use is his brain power to man? It has enabled him to become the supreme animal on Earth . . . at least, outside the microscopic realm. But what competition is left? Only the harshest struggle between individuals, prolonged for many generations, would now give any noticeable advantage to the genius over the average man. (It would also put a premium on innate ruthlessness. so that the eventual superman would be an even meaner cuss than his twentieth century ancestor.) Such highly personal struggles are a rare and short-lived historical phenomenon. It tends to be whole organizations, whole countries, empires, and societies, which clash. Our much-touted American Free Enterprise, to the extent that it has ever existed at all has involved companies far more than single persons.

Even given a pure anarchy, the strong, intelligent men will quickly gather followers and build up disciplined groups. The superior clan or gang—superior more by virtue of effective organization than gifted individuals—wins out. Historical cases in point include the medieval Icelandic republic and our own hillbillies. And after a relatively short time, a still larger organization (the Norwegian crown, the state government) stepped in and knocked the feudists' heads together.

But will not competition between groups put a premium on brains, if only in the leading classes? Not much of one, I'm afraid. We are also developing artificial supplements to our own intelligence. The oldest of these is probably writing; the abacus and the slide rule are venerable enough; now we have electronic computers, tomorrow we will have Lord knows what. Once again, a battery of specialized tools can do a job better and quicker then slowly evolving flesh. Victory will go to the side with the best robots. Insofar as human qualities are important, in war or less violent conflict, they tend to be courage and steadiness of purpose rather than intellectual complexity.

What about intrasocietal competition? The qualities emphasized by it vary from culture to culture, but in general—almost

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

by definition—ability at politicking and at sliding between crannies in the rules makes you richer and more powerful than ability to think abstractly. Even the classic Chinese civil service system laid value on memorization rather than originality.

In fact, throughout past history, any victorious organization soon begins to discourage creativity. The people on top are satisfied with the status quo and do their best to freeze it; their underlings slide meekly enough into a groove which offers, at the minium, status security. If the organization happens to be an empire, it takes outside invasion to destroy the ultimate petrified culture, which otherwise (as in Egypt and China) persists virtually changless for thousands of years.

Seidenberg's *Posthistoric Man* goes so far as to suggest that the world society of the future will, in the course of millennia, destroy first individuality and then consciousness itself. I myself doubt matters will ever get that far. If nothing else, secular changes in climate, soil, etc., will at last force the culture to change, or break it down and thus make room for something new. However, it cannot be denied that there is a strong anti-intellectual tendency in all civilization. There is some reason to think that the average IQ may already be dropping by an estimated ten points per generation. We must come back to this later, under the general topic of dysgenics.

Civilized man will not be quite static biologically. Certain atrophies can be expected to continue, such as the dwindling of the appendix and the little toe. When an organ is no longer useful, when there is no longer any reason to have it in good shape, then natural selection ceases to operate on it, ceases to weed out the occasional bad mutations. The organ accumulates these, gets progressively more degenerate, and finally vanishes. Medicine will hasten this day by saving those people with really bad appendices, who would otherwise not have survived to reproduce. But apart from such minor clearing up of unfinished business, I don't see evolution doing much to improve civilized humanity.

To be sure, nowadays it may seem a rather big assumption that civilization will endure. If it doesn't, if we all go back to the primitive and stay there, then I suppose we can look for radical, if gradual, development of our bodies, along the lines already discussed. I doubt, though, if our brains would evolve much further: even the crudest savages have enough intelligence to cope with any forseeable wild beasts or change of climate.

Thus we seem to have a choice of retaining our scientific culture-basis, and—at best—improving very little biologically; or going back to the woods and developing some truly fine bi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pedal bodies, but no particularly dazzling intellects.

Wait, objects a Shavian in the audience. You haven't said a thing about the third possibility. Let's keep our machines, but breed our own supermen.

The first retort to that proposal is: Why? We have already shown that scientific man doesn't really need to evolve. A glance at the current headlines may provoke you into saying we could use some brains. But it isn't our intellects which have failed us today; hydrogen warhead missiles and strategic analyses are tremendous intellectual achievements. It's our attitudes, our culture if you like, which are at fault, and this is not in the province of biological evolution.

Now it would certainly be nice to have well-designed sinuses and so on. (The reader will have deduced that I live on a seacoast.) It might be even nicer to have an IQ of 400, if such a number means anything. . . . Or would it? The work of Renshaw and others, not to mention traditional Christian, Hindu, and Buddhist disciplines, have proven we're nowhere near realizing our existing potentialities, either physical or mental. It makes no sense to tinker with our structure until we know its limitations—and these we have not yet touched.

Futhermore, I would rather have a few aches and scars, even a shorter life, and my civil liberties, than the essentially totalitarian existence required by any of these man-breeding schemes. You need only sketch out a few of the compulsions involved to see what I mean.

Then there's the fact that we don't have enough knowledge or wisdom to undertake such a project. We have bred plenty of species for this or that set of characteristics, often with great exactitude. The typical result has been a freak unable to survive except with elaborate human care: a cabbage, a pouter pigeon, a Holstein cow. Some of the less throughly bred animals can go wild successfully, but then they take only a few generations to shed their human-imposed traits and revert to the efficient form of dingo, alley cat, mustang, razorback. I doubt very much if we'd have better luck breeding for, say, high intellect. We'd probably get an inferior sort of computer, devoid of vigor and emotional warmth. I have already pointed out that genes seem to operate in complexes, rather than singly; their delicate balance is not lightly to be tampered with.

Finally, even granting us a perfect knowledge of genetics, an ability to design any sort of man we want and make him viable, there's still the question of what we do want. It seems all too likely to me that the artificially created "superman" would be a monster tailored to an ideology. He might be too gentle to fight—and therefore too effete to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

explore, create, and reform. He might represent the attainment of the obscene Soviet goal, men with an instinctive need to work for society. Where I come from, we call 'em ants.

It seems to me that true conservatism, as opposed to reaction, consists in the belief that one man, or one generation, can at best make only a small contribution to the accumulated wisdom of the race. If we expand this idea to mean the biological experience of a billion years, we will be cautious about all these eugenic schemes. We will even be cautious about plans at some future date, to knock undesirable genes right out of the germ plasm. I suppose there is no objection to eliminating the appendix and similar minor improvements, intended merely to strengthen the humanness we already possess. Even this is only worthwhile if it can be done without regimenting individuals. And beyond this, we can too easily get oursleves in trouble.

The foregoing arguments refer only to the positive side of eugenics. There is a negative aspect, far more serious and urgent, which is already with us. I refer to species degeneration.

Mutation (which will go on at an increased rate in the future, thanks to our recklessness with radiations) is nearly always for the worse rather than the better. There are far more ways for such a random process to do things wrong than to do them right. Until fairly recently, the most disastrous results of this were kept out of the race. The victims died early, or they were sterile, or if they reproduced it was at a much lower rate than the healthy norm. But nowdays our civilization has to some extent eliminated natural selection. I have said that men don't need to become any faster or stronger than they are; but under modern conditions, if these outlast the Atomic Age, men don't even need to be that good. A slow, ill-coordinated, dim-witted oaf, who wouldn't have lasted ten years in a forest unless some normal man took him on as a slave, can now become a television executive.

Still more insidious and important are the effects of medicine. The child who gets an old man's illness like cancer can be saved—to pass on his defect. The sterile woman can undergo operations to create fertility—and how many of her descendants will need the same operation? Soon the man who goes insane under moderate pressure will be returned to society, with a bottle of pills to make him as good as new. Eventually, no doubt, even the congenital idiot can be propped up with chemicals; this has already been done in the case of cretinism.

I have sketched out the process by which organs and functions, no longer needed for survival, will degenerate and atrophy. It works just the same for strength, resistance, and in-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

telligence. Lately some children, inoculated against diphtheria, have been getting the disease anyway: they come from an extremely susceptible line, which without vaccination would never have lasted long enough to develop its susceptibility to the present degree.

I say nothing against the doctor who repairs the damage of accident and war. If anything, this favors the race, since strong and active people are probably slightly more exposed to such injuries. Nor do I object to ordinary sanitation, since this only restores a sparseness of pathogens which has always marked unruined nature. But if we keep on supplying our hereditarily unfit with artificial aids, and then turning them loose to breed, at last the entire species will need such help . . . and be as sickly, crippled, and defective as ever in its past. If then that elaborate, overwhelmingly expensive medical system breaks down, humanity will be *kaput*. This consequence of simple genetic law is no more equivocal than any engineering prediction.

The answer is not the murder of the unfit, nor the denial of care to them, but their sterilization: a quick and painless procedure which does no harm to the sexual function. It may seem an infringement of their rights; but if we can put typhoid carriers under certain mild restrictions, why not the carriers of childhood cancer? Various compensations, such as money, could be granted these unfortunates. As a matter of fact, some foreign countries and American states do have laws governing certain cases, chiefly mental deficiency. We need only expand the precedent.

It will, of course, be a knotty problem to define "unfitness." I would say that those are unfit who develop certain diseases and defects prior to the age of about forty. (What happens afterward makes no evolutionary difference, since nearly everyone has finished reproducing by then.) What these troubles are, though, is a somewhat open question. Hemophilia, yes; but bad teeth? And if so, how bad? I suggest that the basic criterion be: "Would this person have a reasonable chance of surviving and reproducing to the age of forty, under more or less 'natural' conditions?"

Inevitably, a degree of arbitrariness remains. "Art, like morality," said G. K. Chesterton, "consists in drawing the line somewhere." The important thing is that we do draw a reasonable line. We needn't do it at once; but neither can we wait many more centuries.

The evolutionary prospect for man is, I think, one of rather small change for the better, provided that he does not realize his all too great chances for degeneration. What we do now to avert the latter seems a good test of our worthiness for the former, a million years hence. **THE END**

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CAMOUFLAGE

By ROG PHILLIPS

ILLUSTRATOR SUMMERS

Either he was going mad, or he couldn't count anymore. For the simple crazy fact stared him in the face: Once there were four spacemen. Now there were five.

FRANK BOMAN had been tossing restlessly in his sleep for hours. Now, suddenly, he was wide awake, the cause of his unrest exploding into consciousness and causing his scalp to prickle, an icy film of moisture to form on his forehead and trickle down his temple.

The whole thing was a simple matter of numbers. Four people, himself included, had started out from Earth in the ship, almost fourteen months ago. The ship had gone to Mars and circled Mars in a survey pattern so that every square foot of Mars could be photographed. Then it had started the return trip to Earth. Not for one second had there been anything but the vacuum of outer space outside the ship. Not once had anyone gone through any of the four airlocks out of the ship, not once had any of the airlocks even been used.

Yet now there were five people, including himself, on board. And how long the fifth person had been there, Frank didn't know. Not only that, he didn't know which was the intruder, because if he thought of each individually he was sure that one had been on board from the beginning.

There was no possibility of error. Four people, four airlocks. Four people, four staterooms. There was himself, and this stateroom. The other half of this level was Andy Stevens' stateroom. Directly over this one was John Porter's. And directly over Thelma Richardson's was Joanne Bentley's.

Four staterooms and five people, and each of the five went into a stateroom with no people

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Frank Boman rushed to the controls knowing he would never make it."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

left over. Four people at the start of the trip, and a hundred definite memories that proved each of the five was one of the four that was there at the start.

That's what had been bothering him, and it wasn't until he had thought to add up the number of people on board that he had realized what was wrong. Himself, John Porter, Joanne Bentley, Andy Stevens, and Thelma Richardson. Five people.

Why?

Frank Boman closed his eyes and concentrated on that question.

Discard the phony bologna of it being a trick of the mind. It was a trick of the mind, all right, but one induced by something alien on board. Because the simple fact of the matter was that nothing *human* could have come on board after the ship left the Earth. In the first place there was nothing human to come on board, except the personnel on the Moon stations, and the ship hadn't come within a hundred thousand miles of the Moon.

There had, of course, been that first ship to Mars, but it had gone out of control and crashed against Mars several years ago. There had been no survivors, and even if there had been, how could one of them have boarded this ship with no radar indication of approach and no memory of arrival?

No human could have boarded the ship without using an airlock, and without leaving a radar record. No human could join them and seem to have been with them all along. It had to be something alien, something out of space itself that could masquerade as a person.

Why would it want to do that?

There could be only two possible answers to that question. To keep the ship and its four humans from returning to Earth, or to get down to the Earth's surface by riding in the ship.

Was there anything he could do about it? Frank Boman turned the question over, examining it. There was nothing he could do about it unless he could determine which one was the intruder.

Then, maybe, he could push whoever it was out into space where she belonged. *She?*

Look at it abstractly, Frank, he said in his thoughts. It's more likely that we were two men and two women when we started out. That would mean that either Andy Stevens or John Porter is the one. We certainly weren't three men and one woman at the start, were we?

Frank Boman knew suddenly that he was going to find out which of them was the intruder and kill him. He would have to be right though. It wouldn't do to kill one of the original four . . .

His decision made, Frank Boman turned on the lights and got

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

out of his bunk. He was heavy set—or rather, he gave that impression because of a large rib case and firm jaw. Five feet eight inches high, and with straw yellow hair that had a slight natural wave in front. Not too intelligent, he made up for that by a bulldog tenacity that had given him a high rating on I.Q. tests and a lot of know-how in gadgetry. He found no trouble in coding information for computers or operating almost any machine. He had been as ideal a choice as could be made for one of the crew of *Mars Explorer II*.

He was twenty-nine years old. He had been born in Boston and acquired a distaste for everything Bostonian. The psychiatrists had put him down as an introvert almost without imagination. They had predicted he would be the least likely to crack up from the fifteen months round trip to Mars.

His stateroom, like the rest of the ship, carried out an unearthly theme of architecture, everything including the floor being padded thickly so that even at six G's sudden acceleration in any direction there was better than an even chance that no bones would be broken. Under the three tenths of a G thrust of the nuclear drives he could walk on the floor of his stateroom with very little give.

He shaved and took a shower, and dressed, putting on loose gray slacks and a gaudy sportshirt. When he was done he viewed himself with satisfaction in the chrome mirror over the wash basin. He liked the shape of his jaw. It gave him an appearance of strength. He liked the faded blue of his eyes, fancying it to be a steel gray. And the truth was that he was no one to tangle with. In spite of his sometime old-womanish mannerisms he could stand up to danger. He had first found that out when he was six, and he had never found anything to make him change his mind. Nothing, that is, except the opposite sex. He had fallen in love twice before, and both times had found the girl of his choice engaged out from under him, and had served graciously as best man at her wedding.

Joanne Bentley was going to be different. Five feet four, a quiet brunette type and a competent physicist just three years his junior, he had had his eye on her from the start. Even if she hadn't been chosen for the trip he had made up his mind he would pop the question to her as soon as possible. So far he hadn't felt it possible.

Now—maybe he should tell her what he had found out. Together they could solve the mystery of the alien intruder. Two heads were better than one, and besides it would provide an opportunity to bring them together.

He jabbed the button of the elevator and when the sugarloaf padded door opened he stepped

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

inside for the ascent to the control room. If he remembered correctly, it was Joanne's shift at the controls.

He was right. She smiled with recognition as he stepped out of the elevator, then turned back to what she was doing. She was, he knew, analyzing the data from the cloud chamber equipment to see if any new particles had been recorded. Of the twenty-eight that were missing from the theoretical meson spectrum, two had been detected so far on the trip. The photographs of their paths were to her a bigger find than anything on the photo maps of Mars they were to bring back.

"Hi, Joanne," Frank Boman said, making sure his voice was studiedly casual.

"Hi, Frank," she answered without looking up.

"My you're absentminded today," Frank said lightly. "Lost in your work as usual."

Joanne Bentley flashed him a quick smile, then bent to her perusal of the photos.

"So absentminded," Frank went on, "that I'll bet you can't tell me right now *how many of us there are aboard!*"

"Sure I can," Joanne said. "Five."

"Five?" Frank said. "There's only four. Name them and you'll find I'm right."

She laid aside the cloud chamber photos with a frown. "Okay, smarty," she said. "There's me, and you, and John and Andy and Thelma. That makes five. Right?"

"How many were on board when we left the Earth?" Frank asked.

"Four," Joanne said. "You, Andy, John, and Thelma—and myself of course."

"That makes five," Frank said patiently.

Joanne counted on her fingers. A momentary look of confusion appeared on her face, then cleared. "Of course!" she said. "Four, plus me! Five!"

"How many staterooms are there?" Frank asked.

"Four." Joanne looked at Frank now, her cloud chamber photos forgotten.

"Does Thelma share your stateroom?" Frank said.

"Of course not!" Joanne said. "We each have our own."

"Four staterooms and five people?" Frank said softly.

"You're being impossible again!" Joanne said angrily. "Honestly, Frank, sometimes I wonder about you. You get on some of the craziest kicks! Why don't you stick to your job?"

"Will you marry me—if we get back to Earth?" Frank blurted.

Joanne's eyes widened. She gasped a couple of times, unable to say anything. Then, "Yes!" she said. "That is, I don't know! You are the most exasperating man I ever met. If . . . ?" Her eyes filmed with tears. The next instant they were hard and clear with congealed anger. "Will you get out of the control room?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

she requested frigidly. "I have work to do, and you're bothering me."

"Okay," Frank said carefully, backing toward the elevator.

It had occurred to him that maybe Joanne was the intruder. She had, he felt sure, been putting on an act. Or had she?

Wouldn't it be logical for the intruder to make him think he was in love with her? *Her?*

In the elevator he punched the button for the first level.

John Porter was shaving when Frank entered his stateroom. "Hi," he said to Frank. "What gets you up so early?"

John Porter was a type that Frank Boman called "misleading." His jet black hair was thin and combed straight back. His face was thin. Thirty-two years of age, he would never look a day over twenty-one, and that was a tragedy for a brilliant surgeon and diagnostician. As though in constant recognition of this tragedy, the right corner of his mouth habitually turned down just a shade in the suggestion of bitterness, and, although it might have been imagination that made it seem so, his brown eyes always held a mocking glint.

Or perhaps there was good reason for the habitual expression, because John Porter's skills at medicine had not been needed yet. Until they were, his surgeon's hands kept in practice by preparing the meals for the crew, and his diagnostic know how kept honed razor sharp analyzing slight inadequacies in food flavors and correcting them.

"I'm hungry," Frank said, then smiled.

"Oh," John Porter said. "I was hoping maybe you had an ache somewhere besides your stomach."

"After breakfast I'll develop one for you," Frank promised. "By the way, how many of us are there on board?"

"Why?" John said. "Is someone missing?"

"Just the opposite, I would say," Frank smiled. "But how many of us are there?"

"Five. At least I feed five, counting myself."

"Are you sure someone isn't getting in line twice?" Frank said. "There's only four staterooms, and each of us has our own. How can you get five people into four staterooms, one to a room?"

John Porter chuckled. "That's a good one," he said. "I often wonder how you symbolic logicians dream them up. Maybe some day one of you will find a way to take out an appendix without cutting the skin."

"No, I mean it," Frank said.

"Please," John Porter said gently. "I haven't had breakfast yet myself."

"How many started this trip?" Frank asked.

"Four of us, of course." John Porter frowned, then did some counting on his fingers. "That is, four besides myself." He

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

laughed again. "You're in high form this morning, Frank," he said admiringly. "For a minute you had me confused. You missed your calling. You should have been a politician. You have the build for it—or a doctor. With your build and appearance and my skills I wouldn't have had to turn into a cook for four scientists, I could be earning enough money to finance this trip." He went to the elevator. "Let's go down and have some breakfast," he said.

They were silent on the way down. The level below the two stateroom levels was all one circular room, with the elevator tube appearing to be a massive column supporting the ceiling. It was as much a recreation room as a dining room. Below it would be the storage compartments and the compact but still huge rocket setup, where atoms were torn apart and accelerated to ninety-nine and a fraction percent of the speed of light in that critical velocity range where a variation of a few inches a second in velocity caused a variation of thousands of pounds of thrust.

Frank had been doing some thinking in the elevator. Now, as John Porter started the coffee, he said, "You have records on all of us, don't you, John? Blood type, and everything else?"

"Naturally," John Porter said. "I have a file on each of you, starting with the records on each of you turned over to me when we left White Sands."

"Would you do something for me?" Frank Boman said.

"Let you look at those records?" John said. "Nope."

"I don't mean look *in* them," Frank said. "Oh well, skip it." He realized suddenly that there would be five files and they would be complete. The intruder wouldn't have overlooked such a simple thing as that.

The elevator door opened and Thelma Richardson and Andy Stevens emerged.

Thelma Richardson was not a type that appealed to Frank. Her popularity puzzled him. Just five feet tall, slim but well proportioned, with dark brown hair, her gay personality animated her otherwise plain features so that one could seldom ignore her presence. Frank had to admit she was doing an exceptional job as the physical chemist in analyzing the physical content of space, but he felt sure nine tenths of it was the equipment.

He ignored her, except for the minimum demands of politeness, and concentrated his attention on Andy, his number one suspect.

Andy Stevens was the athletic type, six feet tall, broad and muscular, his scalp a thick black lawn of hair that stood straight up. It was impossible to imagine Andy without a crew out. He was the youngest member of the crew, twenty-two. He was supposed to have the highest I.Q. His scientific duties were the measuring and recording of all

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

types of infra-red radiation. In addition, it was his responsibility to keep all the equipment in working order and repair anything that ceased to function properly—including the rockets. His face was round, with a well formed mouth that was a shade too large. His eyes were round and flat, with almost black irises. Frank had never seen those eyes anything but friendly, but he had always felt that they carried a potential for malignance.

Now, suddenly, Frank felt fear. Those black irises in Andy Stevens' eyes seemed peepholes into a region of darkness as vast as space.

A memory rose in his mind, of he and Andy and two others bowling in town two days before take-off. He felt a sense of relief, then remembered that he had definite memories of each of the others extending back to before take-off—that is, of all except Joanne Bentley. He could not remember having seen her before take-off. She had been the last to come aboard, he had been told.

The elevator door opened and she came out. All five were together now.

"Well, well," John Porter said. "We're all together in the same room for a change."

"Everything's okay in the pilot room," Joanne said, sitting down at the table. "Nothing within a hundred thousand miles of that will come even close to us."

John Porter made the rounds pouring coffee. "I wasn't thinking of that," he said. "Frank's come up with a startler. A nice mental trick."

"Yes, I know," Joanne said dryly. "He pulled it on me and I almost fell for it."

"What is it?" Andy Stevens asked.

"He asks you out of a clear sky how many people were on board at the start of the trip," Joanne said. "Without thinking you say four, and it's really four *besides yourself.*"

"Oh no," Thelma Richardson said brightly. "There are only four of us altogether."

"Count us," John Porter said.

Thelma looked around the table, then her face clouded with uncertainty. "But there can't be five of us!" she said. Then she exploded into laughter. "That's a good trick, Frank," she said.

"It's no trick," Frank Boman said wearily. "There were only four of us at the start, there are five of us now."

"That's very interesting," John Porter said. "You know what it means, don't you? Your mind has rejected one of us, Frank. It's a simple trick we play on ourselves."

"Then my mind is playing the same trick on me!" Thelma said. "I *know* there were only four of us *altogether* at the start."

"It isn't possible!" John Porter said. "Where would the fifth one of us have come from? We haven't had the airlocks open once. Don't tell me he filtered in

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

through the shell plates and assumed human form!"

"That's exactly what he did—or she," Frank said.

"She?" John Porter said. An amused smile curved his lips. "Who do you think it is, Frank?" he asked softly.

"There's a way of finding out," Frank said. "That is, if we live long enough to find out."

"Oh, come now," John Porter said. "How could we be in any danger?"

"You tell me, John," Frank said. "I keep thinking of the first ship. Why did it crash on Mars?"

"The first ship!" John Porter exploded. "So that's what's been preying on your mind. For fourteen months you've been brooding over it. Now you've rejected one of us. Rejection can be a prelude to murder."

"Murder?" several shocked voices echoed.

"Murder," John Porter said, nodding grimly. "Don't you all see the pattern? In his thoughts he has rejected one of us. Which one? He knows, on some level. I'm a doctor. Among other things I have more than a smattering of psychiatry. I don't even need that smattering to predict that he will attempt to kill the one he has rejected. I think I can even narrow it down to two possible victims. Joanne is one. He's in love with her. Andy is the other, because everyone knows that Andy and Joanne have been together more than anyone else on the ship."

Andy, Joanne, and Thelma were staring at Frank in shocked amazement.

Frank Boman stared back at them with a twisted smile on his square face, his skin a noticeable shade of pink. Suddenly he snorted and turned to John Porter.

"Tell me, John," he said bitterly. "Why have you gone to such lengths to keep me from having a chance to tell how we can discover who the intruder is?" Frank's eyes darted around to see what effect he was having on the rest. "Is it because you are the one?" he asked.

"Me?" John Porter said. "Now you're getting too obvious. The patient wanting to kill the doctor to hide his inner conflict!"

"That's a bit thin," Thelma said. "I think we should listen to Frank."

"All right," John Porter said. "All right with me!"

"It's quite simple," Frank Boman said. "There are four staterooms and five people, one to a stateroom. The staterooms are numbered. I'm in—I won't say the number. My plan is for each of us to write our name and the number of our stateroom on a slip of paper, collect them, and read them off. That will at least narrow it down to two. The two that claim to have the same stateroom."

"Are you really in love with me, Frank?" Joanne asked, her expression serious.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Of course not!" Frank said harshly.

John Porter tore five sheets of paper off the note pad beside the refrigerator and passed them out. Each of the five wrote, and handed the sheet to Frank.

"Thelma Richardson, 3," Frank Boman read aloud. "Andy Stevens, 3." There was an electric tension as Frank turned to the next sheet. "John Porter, 2," Frank read. "Joanne Bentley, 3. Frank Boman, 4." His lip curled. "Very cute," he said. "John, everyone knows your stateroom is number one. Why did you put down number two?"

"Because it is number two," John Porter said. "Number three seems to be quite crowded though. Andy, Joanne, and Thelma."

"Let's all go up and look at number one," Frank said. "There will be personal belongings."

Breakfast forgotten, everyone stood up.

"One thing before we go up," Frank said, his lip curling. "Have I proven my point? I say there's something on board that wasn't here when we started out. Does it want to save us a lot of trouble and admit it now?" Frank looked directly at John Porter.

"Let's look at number one stateroom," John said.

In the elevator they were crowded closely together but no one wanted to be left behind. As the elevator rose slowly Frank said, "There's a question of motive to go into. Why would something native to space want to come aboard and masquerade as one of us? Is it because it's afraid we won't accept it? What does it want? To land on the Earth with us? I for one might be willing to play along with it—if I could be certain it's motives were sincere and not hostile to humanity. What bothers me though is why it would need to board the ship if that were the case. It seems to me it could land on the Earth any time it wished to."

"What bothers me," Andy said, "is what do we do if we find out which one of us it is!"

"Just think," Thelma said in a scared voice. "One of us in this elevator isn't human!"

The elevator stopped and the door opened. Joanne stepped out first. "Well, here we are," she said. "Welcome to my stateroom."

"Yours?" Thelma and Frank croaked in unison. "But you wrote on the slip of paper that you were in number three!"

"I did no such thing!" Joanne said. "Look at them again!"

Frank read the sheets of paper and passed them around. On the one bearing Joanne's name was the number one. But three sheets had the number three on them. Andy's, Thelma's, and Frank's!

"I *know* I'm in four!" Frank shouted. "I *wrote* four!"

"Let's go look," John Porter suggested gently.

Again they were packed tight-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ly in the elevator. It seemed to descend with unusual slowness.

"I'm beginning to be scared," Thelma said.

"If we only knew why!" Frank said. "That's the key to it."

"The what interests me," Andy said. "What could live in empty space, be intelligent, approach the ship without being seen by the radar, slip aboard without opening an air lock, take on human form, and join in with our ship life so skillfully that we don't know when it happened."

"Not so skillfully," Frank said. "I was able to remember that there were only four of us originally."

"That's an interesting point," Andy said. "In the good old detective novel that makes you the only one above suspicion—and consequently the one most likely to be guilty."

"I?" Frank said. "If I were I would know it! And I can assure you that it isn't so."

"Each of us can *say* the same," Andy said. "Let's go into it a little further though. If you hadn't pointed it out, Frank, none of us would have known anything was wrong. Let's assume you're the thing-from-space. What motive could you have for bringing to our attention what you had so skillfully hidden from our conscious minds? When you view it from that angle there's a very good motive. The best."

"What is it?" Frank Boman said.

"When the ship lands," Andy Stevens said, "there must be only four people on board—if there were only four to start with. By bringing the matter up now, just a few days before we are to land, you might convince us that one of us is a thing-from-space, get us to shove our victim out through an airlock disguised by a sack or something so that the radar records won't show a human being has been shoved out."

"A very nice theory," Frank said. "Let's carry it one step further. The intruder needs a victim, let me remember there were only four of us originally, and I stick my neck out. Then he says what you have just said, convinces the others, I'm shoved out into space, and he's solved his problem. Or, to be fair, he or she as you say it."

The elevator door opened.

"Here we are," Frank said. "In *my* stateroom. Number four. Look at the slips of paper now!"

"It still says three," John Porter said. "So do Andy's and Thelma's. Joanne's is one and mine is two."

"Let me see those," Andy said. He took the five sheets of paper and looked at them. "You were lying, John," he said. "Frank's slip says four." He held it up so all could read it.

"I wasn't lying," John Porter said. "You substituted another slip. You're the joker in the deck. And I don't need the slips of paper to prove it. I just happened to remember something.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

My stateroom is two, and Joanne's is across from me. Frank is under me, and Thelma is under Joanne. Where does that leave you, Andy?"

"You're wrong," Frank Boman said. "Andy is across from me. You're over me, and Joanne is across from you."

"Then where's Thelma?" John Porter said.

"She's over Andy," Frank said.

"No I'm not," Thelma said. "I'm across from you, Frank, and Andy is . . ." She looked confused. "I don't believe I ever found out which is Andy's stateroom!"

"What do you say?" John Porter said quickly, looking at Joanne. "Who's under you?"

"Thelma," Joanne said. "Andy's across from Thelma—I think."

"No I'm not," Andy said. "Thelma is over me and Frank is across from me."

"That's right," Frank said.

John Porter shook his head. "Think a minute, Frank," he said. "Thelma is under Joanne. Thelma is over Andy. How can that be with only two levels?"

"Then that pushes Thelma out," Frank said. "Andy is across from me. Let's go over there and you'll see. It's Andy's stateroom."

"It's *my* stateroom!" Thelma said.

"Look," Frank interrupted. "There's a simple way we can at least settle the number of us that started this trip. Let's all go up to the control room and contact White Sands and ask them."

"They'd think us rather silly," Joanne said. "But—I'm for it."

Once again they trooped into the elevator. The door closed.

"The thing that's beginning to bother me," Frank said, "Is, why is whoever it is permitting all this confusion now? What's the reason?" He gave a snorting laugh. "All five of us have never been in the elevator all at once before today. In fact, I can't remember all five of us being together before on the whole trip."

"Of course not," Andy said. "One of us is always in the control room on duty."

"And at any other time," Frank said, "if all five of us got together the first thing that would happen would be that we'd ask who was supposed to be up there." He turned his head until he was looking at Joanne. "You were on duty for six hours. No one else has been at the controls. Come to think of it, it was supposed to be my turn to relieve you, after I had breakfast. What did you do? Head the ship directly toward the moon? We're scheduled to go under it in a few hours. If it weren't for all this confusion —You're the intruder, aren't you."

"That's absurd. Why I have lots of memories before this trip." Joanne's face reflected growing fear.

"What memories?" Frank said as the elevator continued creep-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing upward slowly. "They don't *really* go back, do they?"

"I—I can't remember," Joanne said, tears streaming down her cheeks.

"What are you?" Frank Boman asked.

"I'm—just me!" Joanne said. "I'm not anything but me!"

Frank stared at her thoughtfully. Finally he nodded.

"Maybe that's right," he said. "Maybe you aren't the intruder, but just a human appearance to enable it to blend with us. Then *you* wouldn't know, any more than the changed color on a chameleon knows it's part of the chameleon. Is—"

The elevator door opened. Sounds exploded. The alarm claxon, voices from a loudspeaker. And on the viewscreens a close-up of a moon crater enlarged for a second, as Frank Boman rushed toward the controls, knowing he would never make it.

In the instant before oblivion a tremendous pity welled up in him for Joanne. He had loved her. He loved her even now.

Oblivion? Not quite yet, for the space chameleon had been momentarily stunned in the collision of two thousand tons of matter travelling at a speed of forty miles a second with the solid granite surface of the moon, and for a moment was unable to gather its forces and change to fit in with its environment.

And during that moment while the space chameleon was stunned, Frank Boman stood in the wreckage, unhurt, the meaning of his survival exploding into consciousness with a greater force than the collision of two suns. He was nothing more than a camouflage put on by some unguessable entity of space.

His memories of childhood, his aspirations and skills, his logic and ability to think, his feelings, his love for Joanne, were nothing more to that chameleon-like being than a change in skin color would be to a lizard! He was not *real!* Even the substance of his body was not real, or it would have been scattered in the wreckage around him.

With a soundless cry of loneliness and hopeless despair on his lips, Frank Boman *melted* into a flux of vagueness that—if anyone had been watching—would have seemed to be parts of the wreckage, then jagged rock, then distant stars, as the space chameleon gathered itself together and moved upward from the surface of the moon and out into the reaches of space between the planets.

And there, somewhere along the pathway to Mars, it waited. *Why,* perhaps even it couldn't know. Perhaps it took pleasure in being for a brief period a part of things, or perhaps only an instinct to preserve its domain from invasion caused it to wait, while far below, in a desert a few miles from White Sands, New Mexico, construction was started on *Mars Explorer III* . . .

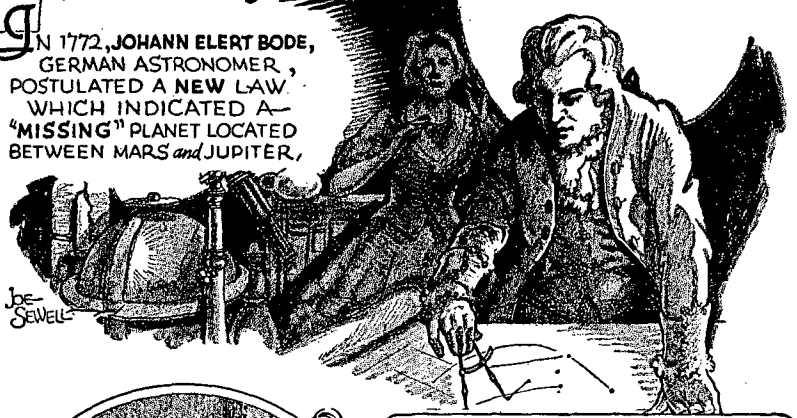
THE END

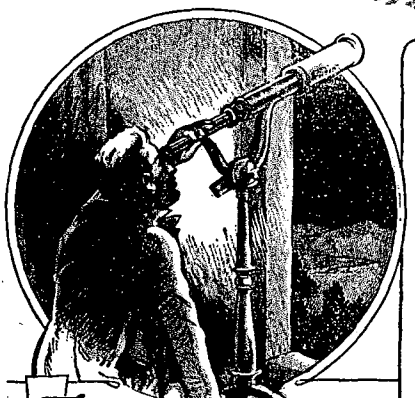
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

RIDDLES OF SCIENCE

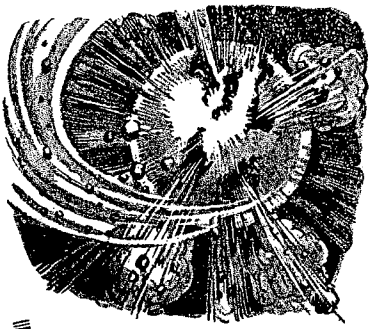
Mystery of the Asteroids

IN 1772, **JOHANN ELERT BODE**, GERMAN ASTRONOMER, POSTULATED A **NEW** LAW WHICH INDICATED A— "**MISSING**" PLANET LOCATED BETWEEN MARS *and* JUPITER,





FOLLOWING BODE'S LAW, **PIAZZI** DISCOVERED THE MINOR PLANET, **CERES**, ON JAN. 1, 1801. **PALLAS, JUNO,** *and* **VESTA** WERE DISCOVERED SEVERAL YEARS LATER. OVER 1000 SMALLER ASTEROIDS ARE NOW CATALOGUED . .

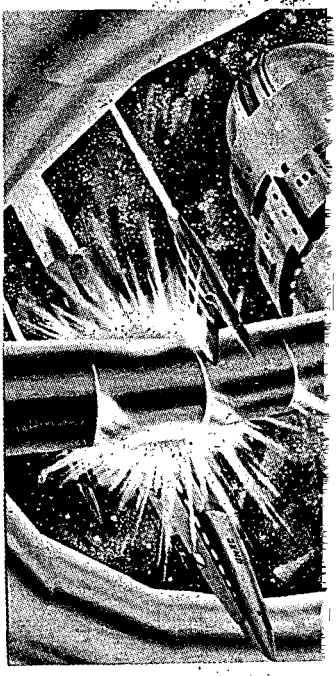


ARE THE **ASTEROIDS** THE DEBRIS OF AN ANCIENT PLANET WHICH MET WITH DISASTER? ARE THEY INTRUDERS FROM OUTER SPACE, PERHAPS A CAPTURED COMET? WHAT IS THE **TRUE STORY** OF THE **ASTEROID BELT**?

THE implications of the asteroid belt are many. Perhaps a giant world once revolved there, as large or larger than Earth, and supported living beings. Perhaps their own science caused a great disaster that destroyed the planet. Perhaps it was a young planet, still incandescent, that blew up in a titanic atomic explosion. Perhaps it was a comet that was trapped by the sun's gravitation. Does it forecast the fate of still others of the sun's children? Is it a forecast of Earth's future? Science would like to know.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A NEW COLLECTION BY TEN OF THE FINEST WRITERS



SCIENCE FICTION GREATS

ROBERT F. YOUNG	DOLL-FRIEND
RAY BRADBURY	THE END OF THE BEGINNING
RANDALL GARRETT	THE MAN WHO HATED MARS
DANIEL F. GALOUYE	THE BIG-BLOW UP
RICHARD WILSON	KILLER IN THE CRIB
ISAAC ASIMOV	THE UNUSED STARS
RON GOULART	JUNIOR PARTNER
HENRY SLESAR	THE SUCCESS MACHINE
POUL ANDERSON	SCIENCE AND SUPERMAN: AN INQUIRY
ROG PHILLIPS	CAMOUFLAGE

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED